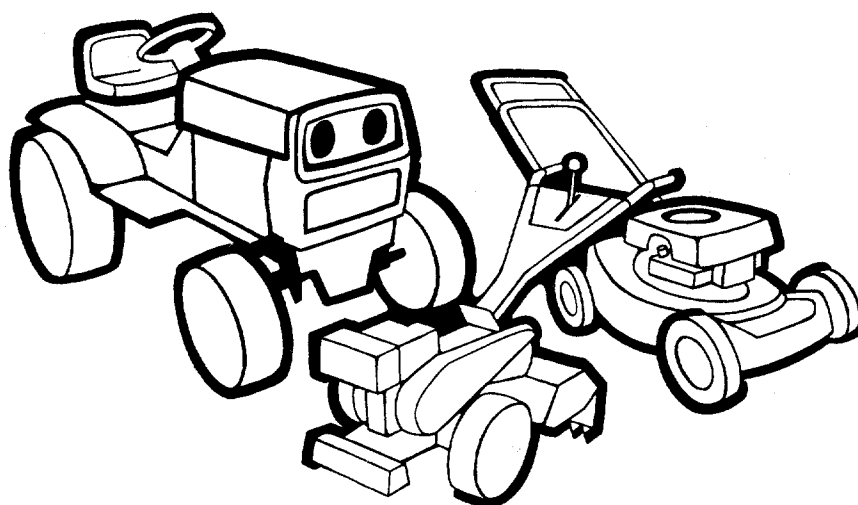


OWNERS MANUAL



5-SPEED TRANSAXLE LAWN TRACTORS

**ASSEMBLY
OPERATION
MAINTENANCE
PARTS LIST**

**Important:
Read Safety Rules and
Instructions Carefully**

**Model Numbers
134-618-000
134-638-000
134-668-000
134-698-000**

Thank you for purchasing an
American built product.

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LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

**WARNING**

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—**READ THIS OWNER'S MANUAL.**
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
6. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
7. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
8. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
9. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
10. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. Disengage all attachment clutches and shift into neutral before attempting to start engine.
14. Disengage power to attachment(s) and stop engine before leaving operating position.
15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
18. Disengage power to attachment(s) when transporting or not in use.
19. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
21. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
22. Stay alert for holes in terrain and other hidden hazards.
23. Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
26. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
31. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
32. Do not change the engine governor settings or overspeed the engine.
33. When using the vehicle with mower, proceed as follows:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
 - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
 - (4) Check blade mounting bolts for proper tightness at frequent intervals.
34. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
36. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

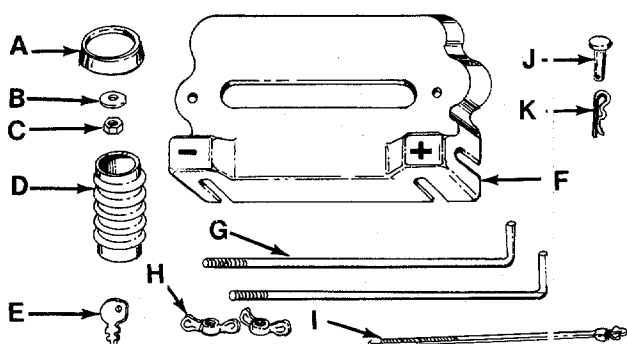


FIGURE 1.

ASSEMBLY

NOTE

Reference to right hand or left hand side of machine is from the driver's seat facing forward.

This owner's manual covers various models of lawn tractors. The units illustrated may vary slightly from your unit. Follow the instructions which pertain to your unit.

Contents of Hardware Pack: (See Figure 1)

- A (1) Steering Wheel Cap
- B (1) Belleville Washer
- C (1) Hex Nut 5/16-18 Thread
- D (1) Steering Bellows
- E (2) Ignition Keys
- F (1) Battery Cover
- G (2) Battery Hold-Down Rods
- H (2) Wing Nuts
- I (1) Cable Tie
- J (1) Clevis Pin
- K (1) Hairpin Cotter

Hardware for Mounting the Seat (Not Shown)

- (2) Hex Bolts and Lock Washers
- or
- (1) Hex Nut and Lock Washer

Loose Parts in Carton:

- (1) Battery Pack
- (1) Steering Wheel
- (1) Seat

BATTERY INFORMATION



WARNING

- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.

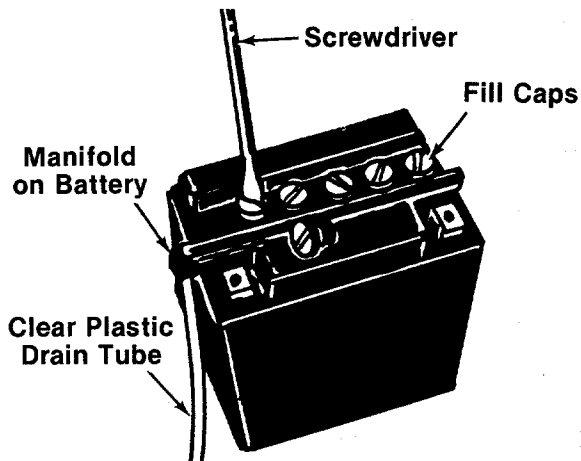


FIGURE 2.

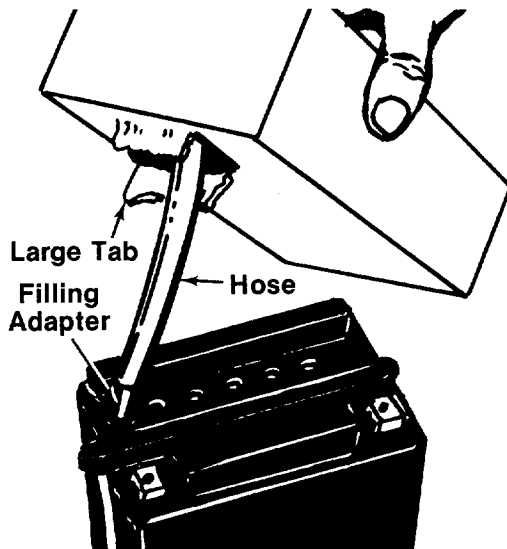


FIGURE 3.

- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware.



WARNING

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

2. Place the battery on table or workbench to be filled.
3. Place one end of clear plastic drain tube on manifold of battery. See figure 2.



NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 2.
5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use any sharp object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 3.
7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 3.



DANGER

Battery contains sulfuric acid. Refer to warning on page 5. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

**KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!**

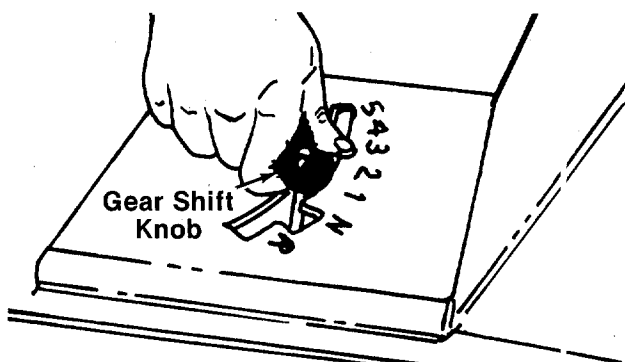


FIGURE 4.

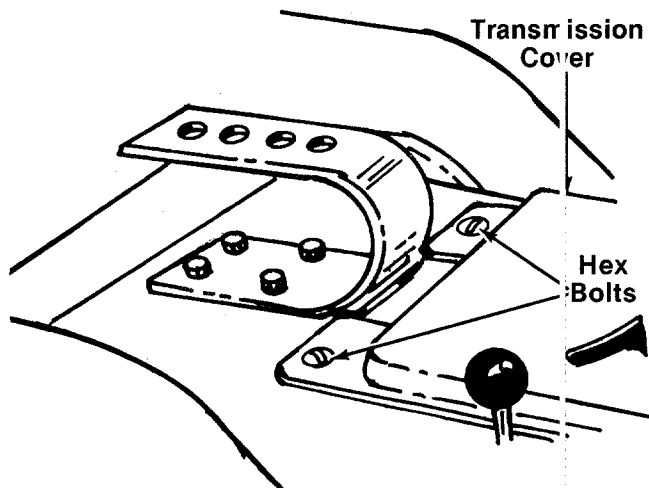


FIGURE 5.

8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.
9. The battery can be charged after the 20 minutes sitting period. **SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE)** at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.



NOTE

Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours. **NO LONGER THAN 30 HOURS.**



CAUTION

After battery has been in service, add only distilled water. **DO NOT ADD ACID.**



NOTE

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the lawn tractor after winter storage.

INSTALLING THE BATTERY

- ← 1. Place gear shift lever in the "neutral" position. Unscrew the gear shift knob. See figure 4.

- ← 2. Remove the two hex bolts which secure the transmission cover. See figure 5.



NOTE

The transmission cover on your unit may be secured with 1/4 turn studs. Push down and turn the studs one-quarter turn to remove the cover.

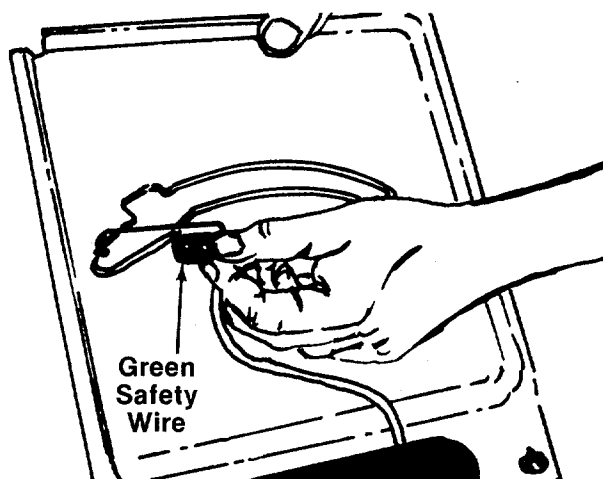


FIGURE 6.

3. Lift the transmission cover. Unplug the green safety wire from beneath the transmission cover. See figure 6. Remove transmission cover.

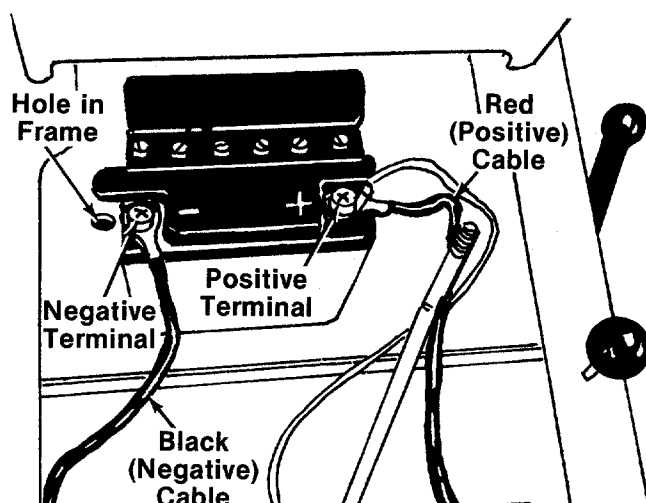


FIGURE 7.

4. Place the battery in the lawn tractor so that the positive terminal is facing the right side of the unit. See figure 7.



Right and left hand sides of the unit are determined from the operating position, facing forward.

5. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Place the positive (heavy red wire) cable and the small red wire on the positive terminal. Secure with screw and lock washer provided. See figure 7.
6. Slide the square nut (provided with battery hardware) into the negative (-) terminal. Place the negative (heavy black wire) cable on the negative terminal. Secure with screw and lock washer provided.

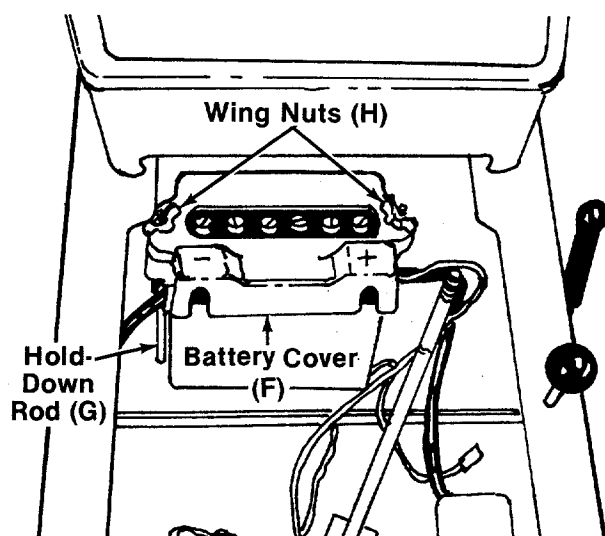


FIGURE 8.

7. Hook one hold-down rod (G) into the hole in the frame beside the battery. See figure 7. Place the battery cover (F) in position over the hold-down rod. Secure with wing nut (H). Attach other hold-down rod to the other side of battery cover in the same manner. See figure 8.

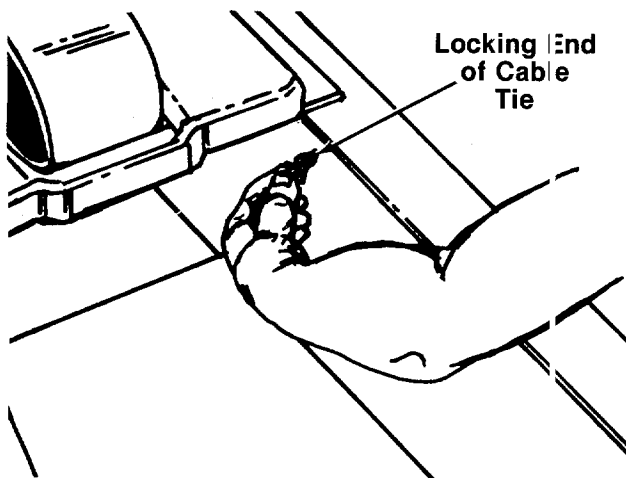


FIGURE 9.

8. Push the locking end of cable tie (I) through the hole in the left frame as shown in figure 9. Route the battery drain tube back to the cable tie. Place end of cable tie through the slot so a loop is formed around the drain tube to secure it. Tighten cable tie and cut off excess end.
9. Plug the green safety wire into the switch beneath the transmission cover. Refer to figure 6. Replace the transmission cover and gear shift knob.

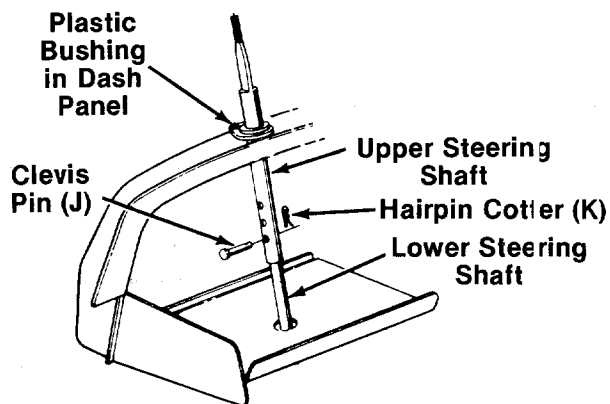


FIGURE 10.—Model 698 Shown

STEERING WHEEL INSTALLATION

1. For shipping purposes, the upper steering shaft is pushed all the way down over the lower steering shaft. Pull the upper steering shaft up. The three holes in the shaft provide three steering wheel heights. Select desired hole and secure with clevis pin (J) and hairpin cotter (K). See figure 10.

NOTE

On model 668, the three adjustment holes are located above the dash panel.

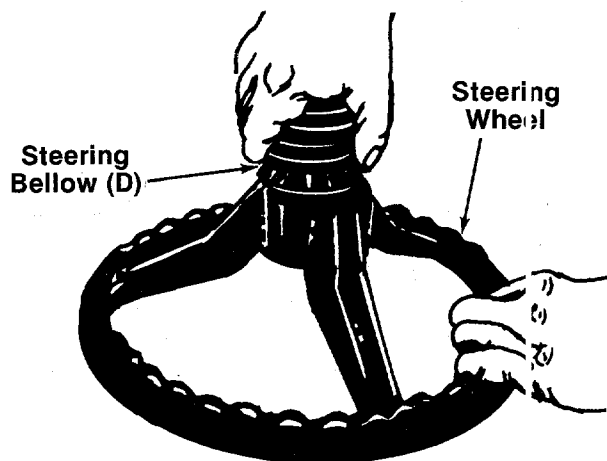


FIGURE 11.

2. Attach steering bellow (D) to the steering wheel as shown in figure 11.

NOTE

One end of the steering bellow is slightly larger than the other. The larger end must be assembled to the steering wheel.

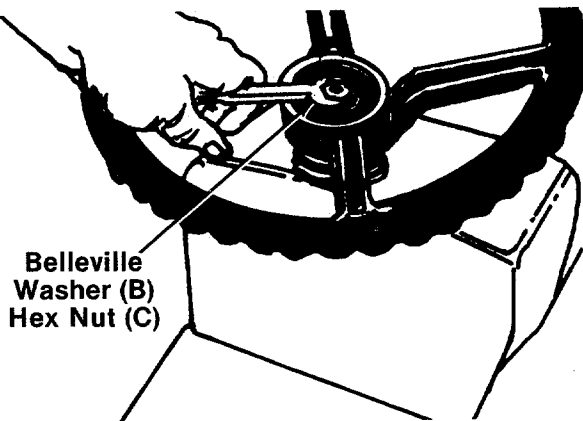


FIGURE 12.

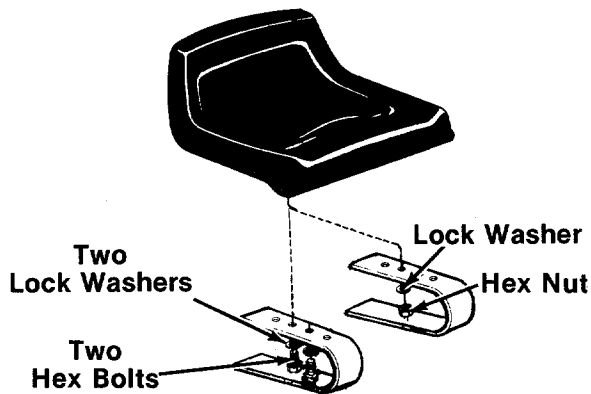


FIGURE 13.

CONTROLS

THROTTLE CONTROL

The throttle control is used to regulate the engine speed and to activate the choke on the engine. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. Pushing the throttle all the way forward past FAST, will choke the engine. See figure 14.

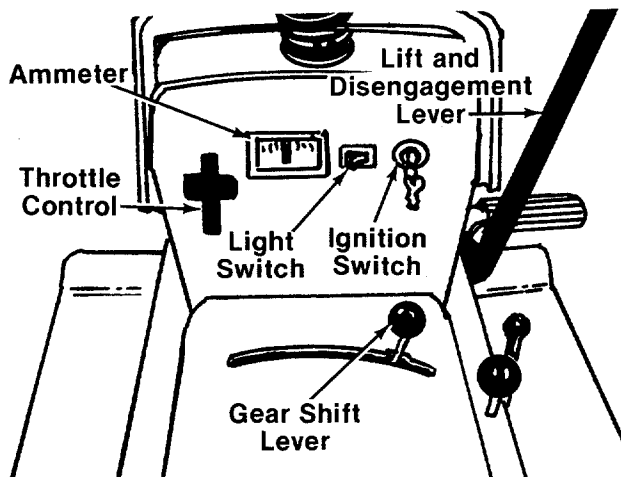


FIGURE 14.—Models 638 and 698 Shown

3. Place steering wheel and bellow on the steering shaft, lining up the flats in the wheel with the flats on the shaft.
4. Secure with belleville washer (B) (cupped side against the steering wheel) and hex nut (C). See figure 12.
5. Press the steering wheel cap (A) on the steering wheel by hand.

SEAT INSTALLATION

Your seat mounts to the unit in one of two ways.

- A. Two weld nuts in the bottom of the seat:
The seat may be adjusted to three different positions. Select desired position and secure to seat spring with two hex bolts and lock washers. See figure 13.
- B. Weld bolt in the bottom of the seat:
The seat may be adjusted to four different positions. Select desired position and secure to seat spring with one lock washer and hex nut. See figure 13.

GEAR SHIFT LEVER

The gear shift lever is used to shift into one of the forward gears, "NEUTRAL" or "REVERSE." See figure 14.

IGNITION SWITCH

Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting. See figure 14.

LIGHT SWITCH (Optional)

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 14.

AMMETER (Optional)

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side when starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 14.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the right side of the lawn tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake. See figure 15.



NOTE

The clutch-brake pedal must be depressed to start the engine.

PARKING BRAKE

To set the parking brake, depress the clutch-brake pedal and press the parking brake knob down. To release the parking brake, depress and release the clutch-brake pedal. See figure 15.

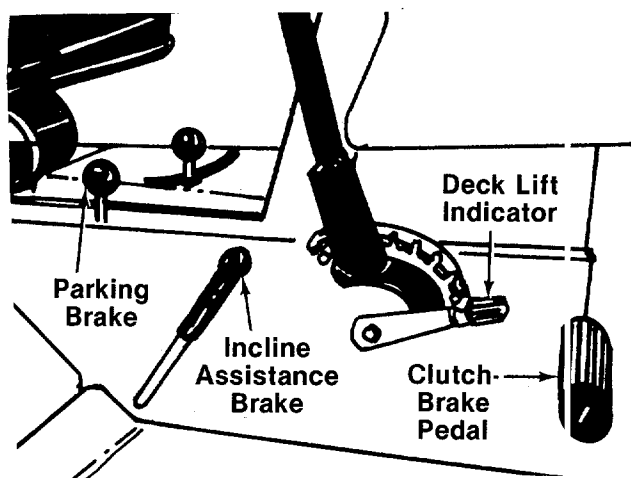


FIGURE 15.

INCLINE ASSISTANCE BRAKE

When stopping on a hill, hold the incline assistance brake lever back while you release the clutch-brake pedal until the lawn tractor begins to move, then release the lever. This lever permits smoother starts and clutch engagement by holding the tractor during the brake release/clutch engagement operation. See figure 15.

INTERLOCKS (Not Shown)

Interlock safety switches are located on the clutch-brake pedal, and the lift and disengagement lever and gear shift lever.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse, the lift and disengagement must be in the disengaged position.

CUTTING CONTROLS

A. LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the cutting deck. Pulling it all the way back and locking it disengages the blades. The lift and disengagement lever **must** be in the disengaged position when starting the engine and when shifting into reverse. See figure 14.

B. DECK LIFT INDICATOR

The deck lift indicator marks the position being used for the lift lever. Select the lift lever position desired, press the indicator lever outward, move it to the position immediately below the lift lever and release the indicator lever. See figure 15.

C. WHEEL HEIGHT ADJUSTER

Move the lever towards the wheel and set it in the desired height. See figure 16.

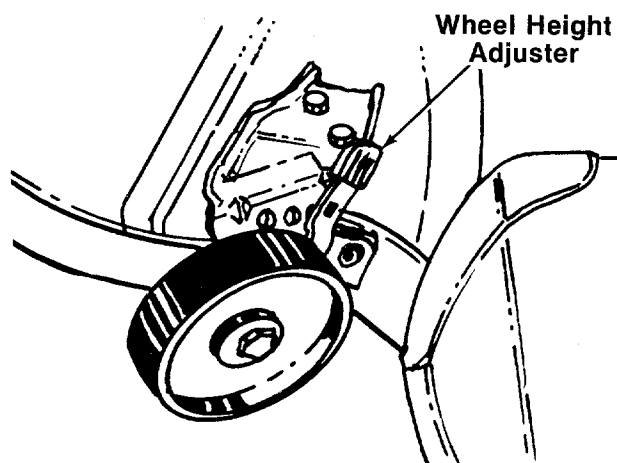


FIGURE 16.

D. SETTING THE CUTTING HEIGHT

1. Select the position for the lift lever which gives the desired cutting height. Move the deck lift indicator so that the lift lever can be returned to the same position after it is raised.
2. Set the wheel height adjusters on the deck so that the wheels are $\frac{1}{4}$ to $\frac{1}{2}$ inch above the ground.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.

OPERATION



CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
 - a. Shift transmission to neutral
 - b. Set parking brake
 - c. Disengage attachment clutch
 - d. Shut off engine
 - e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

STARTING THE ENGINE



NOTE

To open the hood, simply lift up on both sides of the hood on models 618, 638 and 698.

1. Service the engine with oil and gasoline as described in the engine manual.
2. Depress the clutch-brake pedal and set the parking brake. See figure 15.
3. Place the lift and disengagement lever in the DISENGAGED position. See figure 15.



NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition, the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.



WARNING

Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

4. Set the throttle control in the CHOKE position. See figure 14.
5. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figure 14.
6. Move the throttle control to desired engine speed.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position. Remove the key to prevent accidental starting.



NOTE

A brief break-in period is essential to ensure maximum engine and mower life. The break-in consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 5 hours of operation.



IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine as instructed in previous column.
3. Move throttle control to desired engine speed.
4. Depress the clutch-brake pedal and shift into first gear or reverse.
5. Release clutch-brake pedal slowly to put unit into motion.
6. Depress the clutch-brake pedal when shifting gears.



NOTE

Do **not** force the gear shift lever!

7. The lawn tractor is brought to a stop by depressing the clutch-brake pedal. The drive belt will be disengaged and the brake will be applied.



CAUTION

If the unit is not to be used for a long period, place the gear shift lever in NEUTRAL, stop the engine, set the parking break and remove the key. DO NOT leave the machine on an incline.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the lawn tractor is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.



WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening, the blades or any part of the deck.

Move the lift and disengagement lever into the DISENGAGED position to raise the deck and disengage the blades.



NOTE

When the machine is used for other than mowing operations, the blade drive should be disengaged.

GRASS CATCHER Model No. 015 is available as optional equipment for the lawn tractor shown in this manual.



WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.



NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

ADJUSTMENTS

SEAT ADJUSTMENT

The seat may be adjusted to one of several positions. Refer to seat installation section of assembly instructions.

STEERING WHEEL ADJUSTMENT

There are three height positions for the steering wheel. To adjust the height of the steering wheel, remove the hairpin cotter and clevis pin on the steering shaft. Place the steering wheel in the position desired and secure with hairpin cotter and clevis pin. Refer to figure 10.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

1. Remove the hex nut and lock washer, and drop the tie rod end from the wheel bracket. See figure 17.
2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

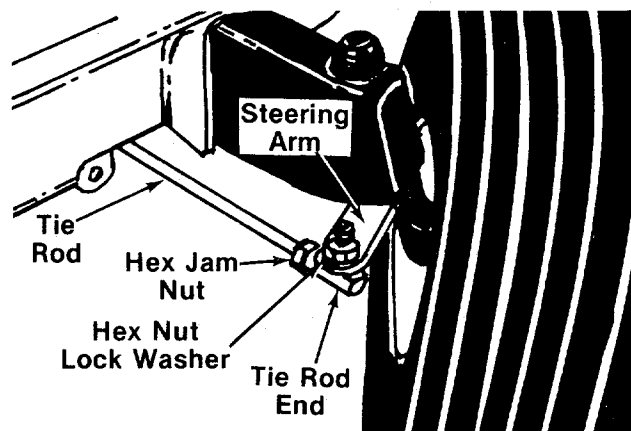


FIGURE 17.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 18.

- A.) To increase Dimension "B," screw tie rod into tie rod end.
- B.) To decrease Dimension "B," unscrew tie rod from tie rod end.
- C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

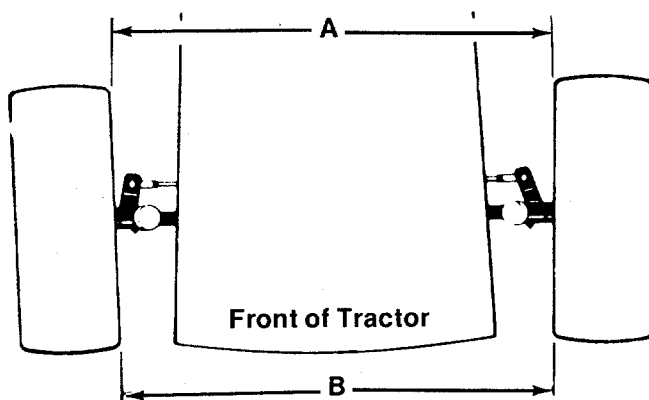


FIGURE 18. TOE-IN DIAGRAM

CARBURETOR ADJUSTMENT



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches, and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load. To adjust the carburetor, refer to the separate engine manual packed with your unit.

BRAKE ADJUSTMENT

During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.



CAUTION

Do not have the engine running when you adjust the brake.

To adjust the brake, proceed as follows.

1. Tighten the inside nut until the cam lever can not be moved by hand.
2. Loosen the inside nut until the cam lever can be pushed forward so that there is a 1/8" to 3/16" space between the cam lever and stop bolt. See figure 19.

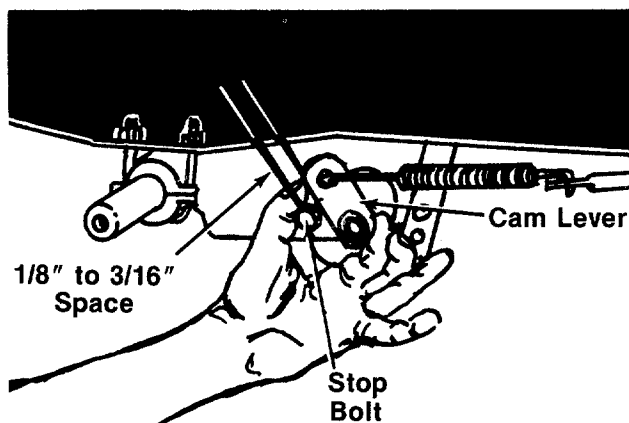


FIGURE 19.

3. Tighten the outside nut against the inside nut, using two 1/2" wrenches. See figure 20.



Friction pads must be replaced when the inside of cam lever touches the housing.

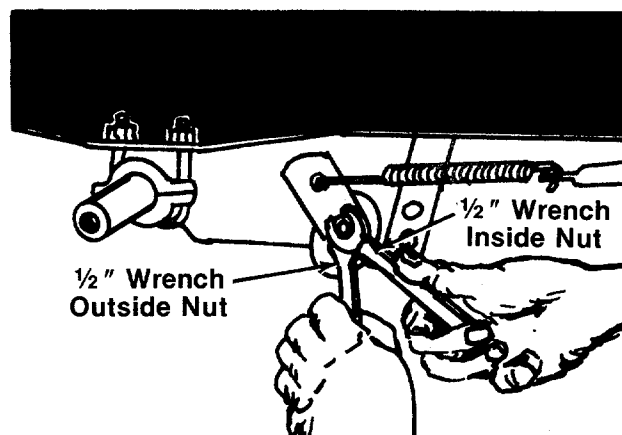


FIGURE 20.

LUBRICATION

STEERING GEARS

Lubricate teeth of steering gears with automotive multi-purpose grease after every 25 hours of operation or once a season. See figure 21.

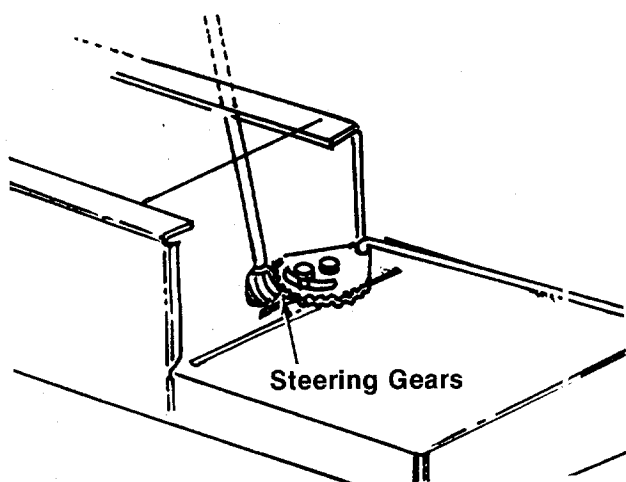


FIGURE 21.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

TRANSAXLE

The transaxle is lubricated and sealed at the factory and does not require checking. If disassembled for any reason, lubricate with 24 oz. of E.P. Lithium grease.

FRONT WHEELS

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multi-purpose grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

MAINTENANCE



Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

CRANKCASE OIL

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil level should be maintained as instructed in the separate engine manual.

After the first five hours of operating a new engine, drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. Refer to the engine manual.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. To service the air cleaner, refer to the separate engine manual packed with your unit.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specification.

CUTTING BLADE

A. Removal for Sharpening or Replacement



Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.



NOTE

It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the crankshaft.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.

5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your engine authorized service dealer.

DRIVE BELT REMOVAL AND REPLACEMENT



WARNING

Disconnect the spark plug wire and ground it against the engine.



NOTE

Figures 22 through 26 are shown with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

1. Place the lift lever in the disengaged position.
2. Remove the two hex bolts (belt keepers) from the engine pulley belt guard. See figure 22.

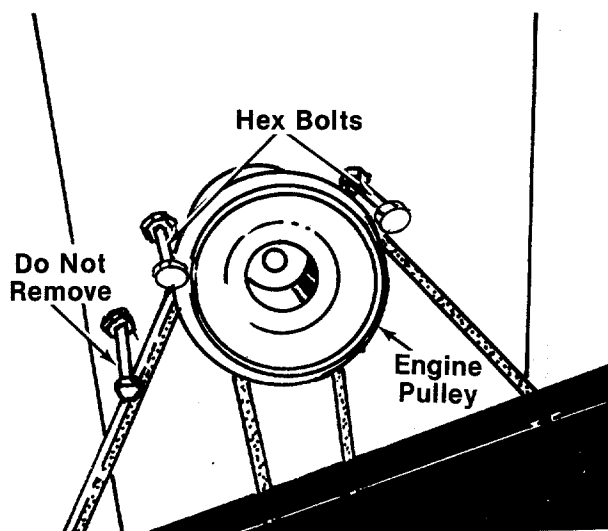


FIGURE 22.

3. Unhook the deck belt from the engine pulley.
4. Remove the two bolts, lock washers and nuts on each side of the frame which hold the engine pulley belt guard to the frame. See figure 23.

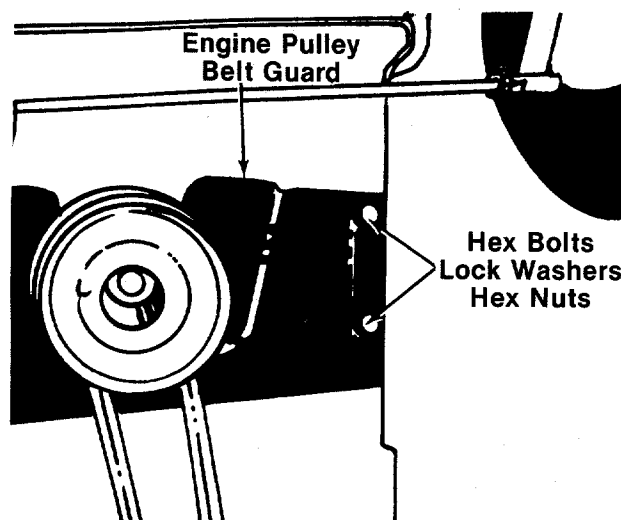


FIGURE 23.

5. Remove the engine pulley belt guard by slipping it back and to the right. See figure 24.

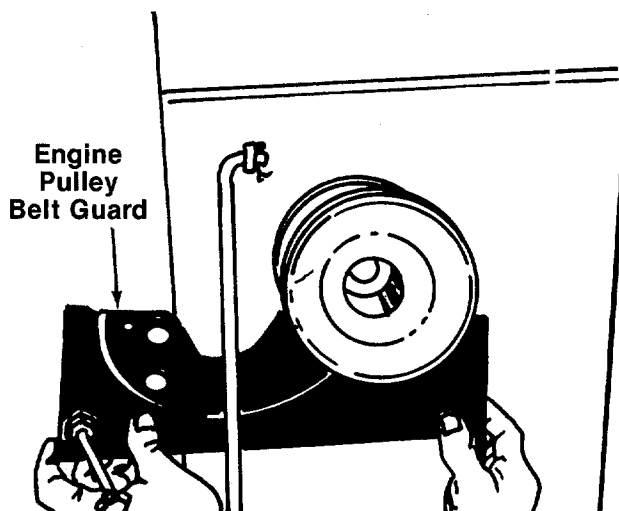


FIGURE 24.

6. Remove the bolt, lock washer and nut which hold the idler pulley to the idler bracket. See figure 25.



NOTE

Upon reassembly, the hub side of the idler pulley must be assembled against the idler bracket.

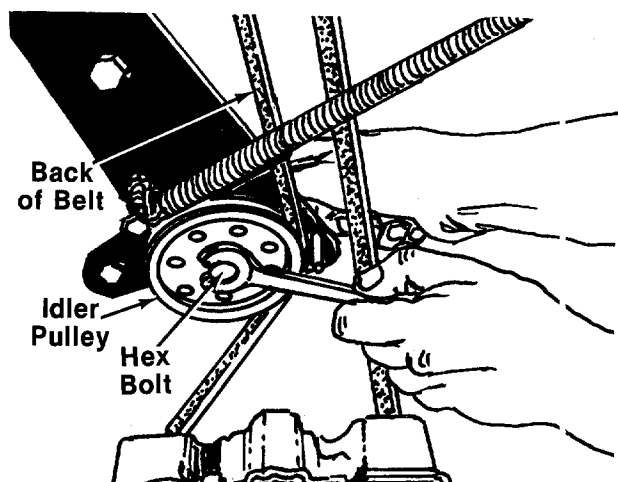


FIGURE 25.

7. Remove two self-tapping screws which hold the transaxle belt guard to the top of the transaxle. See figure 26.
8. Remove the transaxle shift lever by removing the hex bolt and belleville washer. Lift off the special "D" washer. See figure 26.
9. Slide the transaxle belt guard back. Remove the belt from the engine pulley. Lift the belt up and over the transaxle pulley.

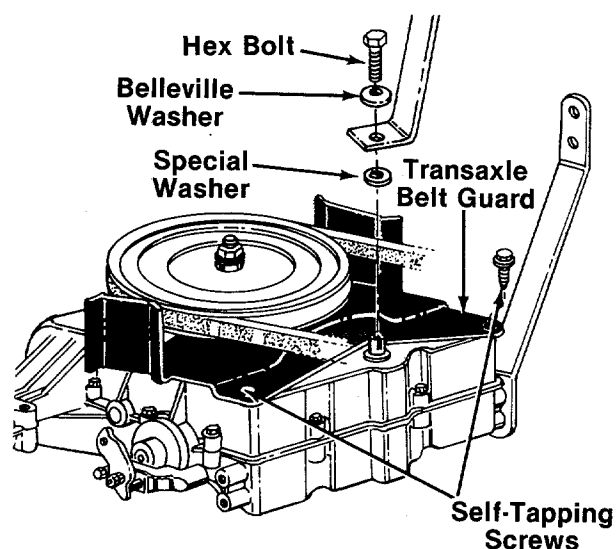


FIGURE 26.

10. Reassemble with a new belt, following instructions in reverse order.



IMPORTANT

The belt must be reassembled as shown in figure 25, with the back of the belt (flat side) against the idler pulley. The belt must be inside the pins. Failure to assemble the belt correctly will damage the belt.

BATTERY REMOVAL OR INSTALLATION



WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



WARNING

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or a good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose holds downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte



NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

INSTALLATION OF TIRE TO RIM



WARNING

The following procedure must be followed when removing or installing a tire to the rim.

1. Be sure rim is clean and rust free.
2. Lubricate both the tire and rim generously.
3. Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

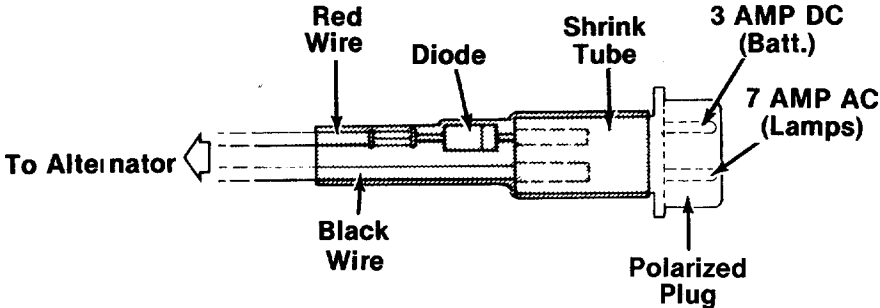
1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions in previous column.
5. Store unit in a clean, dry area.



CAUTION

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rust proof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

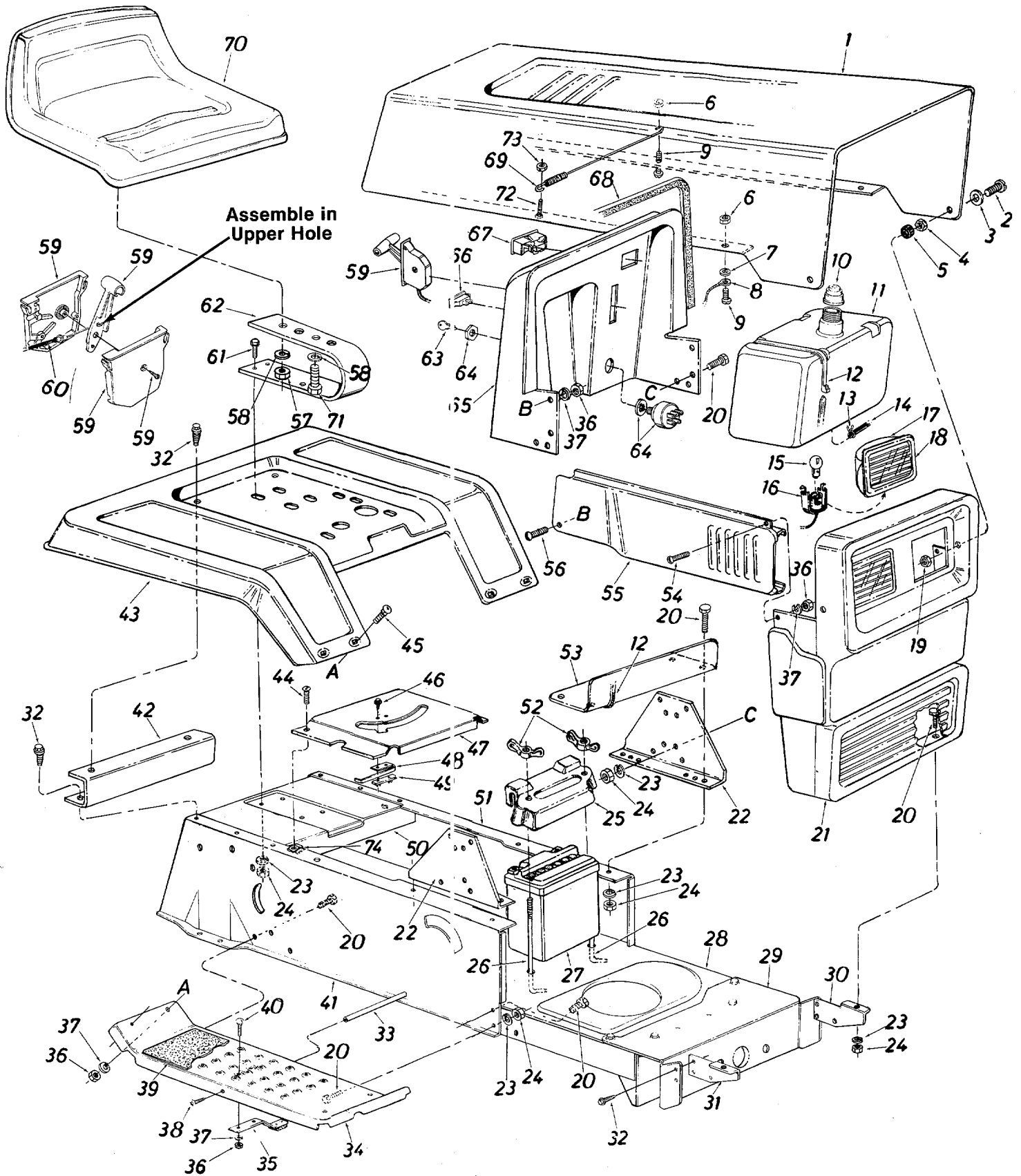
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	<p>Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger.</p> <p>Trickle Charger. Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1/2 amp.</p> <p>Alternator (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.</p> <div style="text-align: center;">  </div> <p>The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.</p>
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) for starting.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission gear. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

Model 618



Model 618

PARTS LIST FOR MODEL 618 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	15808		Hood	N	41	14602		R.H. Side Frame	
2	710-0255		Truss Hd. Scr. 1/4-20 x .75" Lg.*		42	15848		Fender Mount Brace	N
3	736-0463		Fl-Wash. .296" I.D. x .62" O.D.		43	15887		Rear Fender	N
4	712-0287		Hex Nut 1/4-20 Thd.*		44	15350		Rear Fender†	
5	735-0144		Rubber Wash. 1/2" I.D. x 1.0" O.D.		45	710-0351		Truss Mach. Tap Screw #10 x .50"	
6	712-0272		Hex Sems Nut #13-24 Thd.*		46	710-0167		Carriage Bolt 1/4-20 x .50" Lg.*	
7	736-0931		Fl-Wash. .203" I.D. x .41" O.D. x .040		47	710-0473		Truss Hd. Scr. #10-24 x .50" Lg.*	
8	727-0290		Hood Stop		48	15823		Transmission Panel	N
9	710-0473		Truss Hd. Scr. #10-24 x 1/2" Lg.*		49	725-0759		Reverse Safety Switch	
10	723-0155		Fuel Cap Gauge		50	726-0222		Insulator Nut Plate	
11	751-0172		Fuel Tank		51	14607		Hitch Plate	
12	726-0209		Tie Strap		52	14603		L.H. Side Frame	
13	726-0207		Hose Clamp		53	712-0113		Wing Nut 1/4-20 Plastic	
14	751-0173		Fuel Line		54	14605		Fuel Tank Support	
15	725-0963		Lamp	N	55	710-0255		Truss Hd. Scr. 1/4-20 x .75" Lg.*	
16	725-0964		Socket	N	56	15814		Side Cover—R.H.	N
17	731-0705		Headlight Housing	N	57	15815		Side Cover—L.H. (Not Shown)	N
18	731-0706		Lens	N	58	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.*	
19	712-0324		Hex Sems Ins. L-Nut 1/4-20 Thd.		59	712-0206		Hex Nut 1/2-13 Thd.*	
20	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		60	736-0921		L-Wash. 1/2" I.D.*	
21	15804		Grille	N	61	831-0692		Throttle Control Box Ass'y.	N
22	15805		Grille Without Headlights	N	62	746-0500		Throttle Control Wire (B&S)	
23	15818		Dash Support Bracket	N	63	746-0504		Throttle Control Wire (Tec.)	
24	736-0119		L-Wash. 5/16" I.D.*		64	710-0376		Hex Bolt 5/16-18 x 1.00" Lg.*	
25	712-0267		Hex Nut 5/16-18 Thd.*		65	732-0458		Seat Spring 5.5" High	N
26	731-0708		Battery Cover	N	66	725-0201		Ignition Key	
27	711-0222		Battery Hold Down Rod		67	725-0267		Ignition Switch	
28	725-0514		12V—Battery		68	15810		Dash Panel	N
29	14606		Lower Frame		69	725-0634		Light Switch. (Optional)	N
30	14619		Front Pivot Brk't.		70	725-0925		Ammeter (Optional)	N
31	15821		Grille Mount Brk't.—L.H.	N	71	731-0511		Molding Strip	
32	15822		Grille Mount Brk't.—R.H.	N	72	732-0462		Hood Spring	N
33	710-0726		Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.		73	757-0264		Seat Ass'y. (Used w/Hex Nut)	
34	738-0526		Running Board Rod		74	757-0299		Seat Ass'y. (Used w/Hex Bolts)	
35	14604		Running Board (R.H. & L.H.)		75	710-0493		Hex Bolt 1/2-13 x 1.0" Lg. (2 Req'd.) (Optional)	
36	—		Blade Brake Ass'y. (Refer to Deck Breakdown)		76	710-0749		Hex Bolt #10-24 x 1.0" Lg.	
37	712-0287		Hex Nut 1/4-20 Thd.*		77	712-0102		Hex Top L-Nut #10-24	
38	736-0329		L-Wash. 1/4" I.D.*		78	726-0139		Speed Nut #10Z	
39	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*						
40	723-0360		Foot Pad (Optional)						
41	710-0134		Carriage Bolt 1/4-20 x .62" Lg.*						

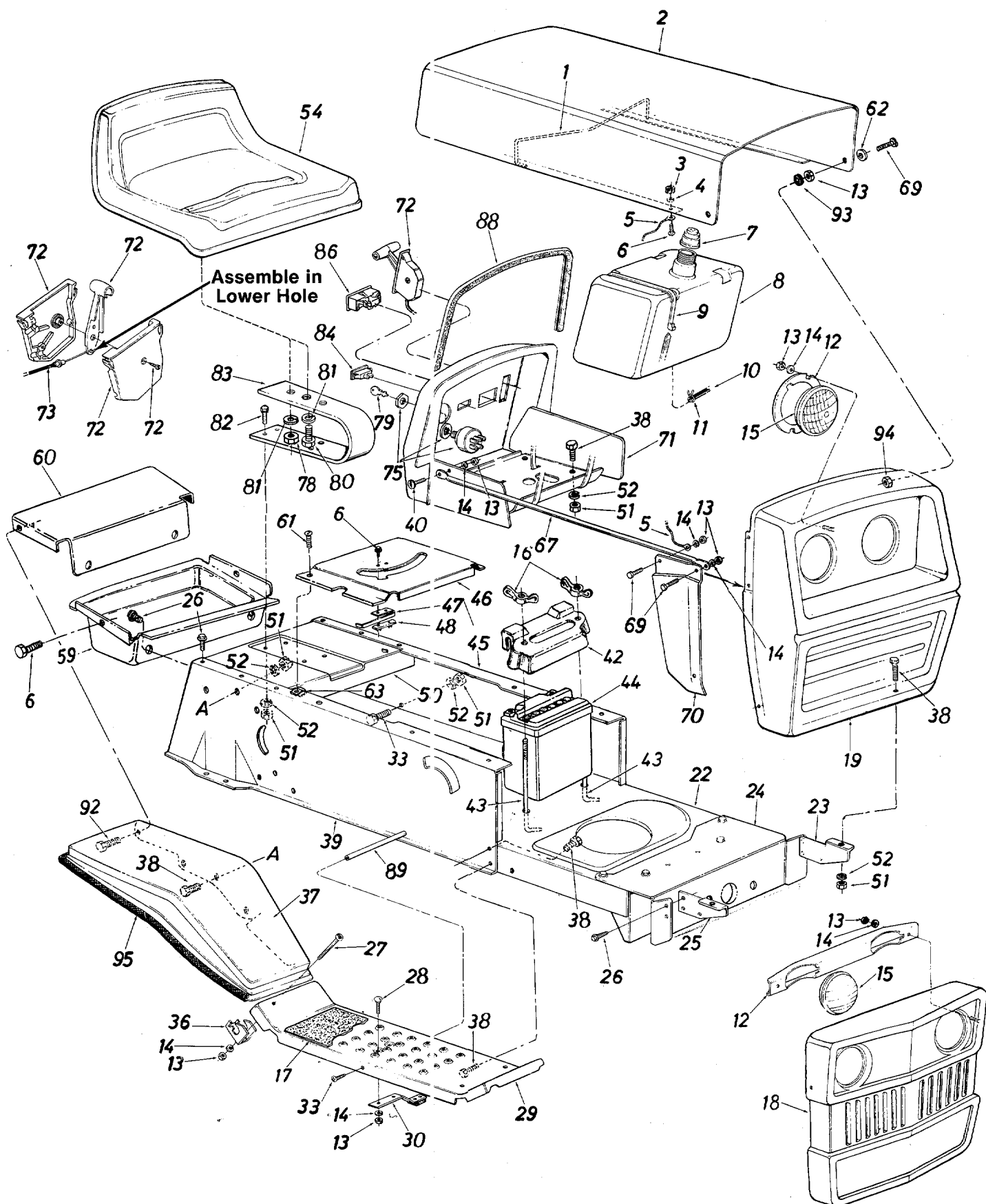
†Used with 36" Rear Discharge Deck Only.

(462—Red Flake)

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

Models 638 and 698



Models 638 and 698

PARTS LIST FOR MODELS 638 AND 698 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	732-0414		Hood Spring		44	725-0514		12-V Battery	
2	14616	—447	Hood†		45	14603		L.H. Side Frame	
	14665	—447	Hood††		46	15823		Transmission Panel	N
3	712-0272		Hex Sems Nut #10-24 Thd.*		47	725-0759		Reverse Safety Switch	
4	736-0463		Fl-Wash. .281" I.D. x .62" O.D. x .051		48	726-0222		Insulator Nut Plate	
5	723-0302		Hood Stop 7" Lg.		50	14607		Hitch Plate	
6	710-0473		Truss Hd. Scr. #10-24 x 1/2" Lg.*		51	712-0267		Hex Nut 5/16-18 Thd.*	
					52	736-0119		L-Wash. 5/16" I.D.*	
7	723-0155		Fuel Cap Gauge → 723-0333		54	757-0264		Seat Ass'y. (Used w/Hex Nut)	
8	751-0172		Fuel Tank			757-0299		Seat Ass'y. (Used w/Hex Bolts)	
9	726-0209		Tie Strap						
10	751-0173		Fuel Line	59	731-0561		Tool Tray (Optional)		
11	726-0207		Hose Clamp	60	14789		Fender Panel (Optional)		
12	14672		Headlight Retainer†	61	710-0351		Truss Mach. Tap Screw #10 x .50"		
	09960		Headlight Retainer††						
13	712-0287		Hex Nut 1/4-20 Thd.*	62	736-0463		Fl-Wash. .296 I.D. x .62 O.D.		
14	736-0329		L-Wash. 1/4" I.D.*	63	726-0139		Speed Nut #10Z		
15	725-0222		Headlight	67	749-0517		Grille Support Rod (R.H. & L.H.)		
16	712-0113		Wing Nut 1/4-20 Thd.						
17	723-0360		Foot Pad (Optional)	69	710-0255		Truss Hd. Scr. 1/4-20 x .75" Lg.*		
18	14635		Grille Ass'y. (Optional)						
	14612		Grille Without Headlights	70	14670		R.H.—Grille Side Panel†		
19	14781		Grille Ass'y. (Optional—Painted)		14748		R.H.—Grille Side Panel††		
	14674		Grille Ass'y. (Optional—Chrome)		14669		L.H.—Grille Side Panel†		
					14749		L.H.—Grille Side Panel††		
22	14606		Lower Frame	71	15933		Dash Panel Ass'y.		
23	13863		Grille Mount Brkt.—L.H.	72	831-0692		Throttle Control Box Ass'y.	N	
24	14619		Front Pivot Brkt.	73	746-0501		Throttle Control Wire (B&S)		
25	13862		Grille Mount Brkt.—R.H.		746-0504		Throttle Control Wire (Tec.)		
26	710-0726		Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.	75	725-0267		Ignition Switch		
				78	712-0206		Hex Nut 1/2-13 Thd. (Optional)		
27	710-0524		Truss Hd. Scr. 1/4-20 x 1.75" Lg.*	79	725-0201		Ignition Key		
28	710-0134		Carriage Bolt 1/4-20 x .62" Lg.*	80	710-0493		Hex Bolt 1/2-13 x 1.00" Lg. (2-Req'd.) (Optional)		
29	14604		Running Board (R.H. & L.H.)	81	736-0921		L-Wash. 1/2" I.D.*		
30	—		Blade Brake Ass'y. (Refer to Deck Breakdown)	82	710-0376		Hex Bolt 5/16-18 x 1.00" Lg.*		
33	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	83	732-0458		Seat Spring	N	
36	14671		Fender Clamp	84	725-0634		Light Switch (Optional)		
37	14666		Fender (R.H. & L.H.)	86	725-0925		Ammeter (Optional)	N	
	15350		Fender (R.H. & L.H.) used w/36" Rear Discharge Deck	88	731-0511		Molding Strip 27" Lg.		
				89	738-0526		Running Board Rod		
38	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	92	710-0599		Thread Rolling Scr. 1/4-20 x .50" Lg.		
39	14602		R.H. Side Frame	93	735-0144		Rubber Wash. 1/2" I.D. x 1.0 O.D. x .25"		
40	710-0258		Hex Bolt 1/4-20 x .62" Lg.*	94	712-0324		Hex Sems Ins. L-Nut 1/4-20 Thd.		
42	731-0708		Battery Cover						
43	711-0222		Battery Hold Down Rod	N	95	731-0516		Trim Strip	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

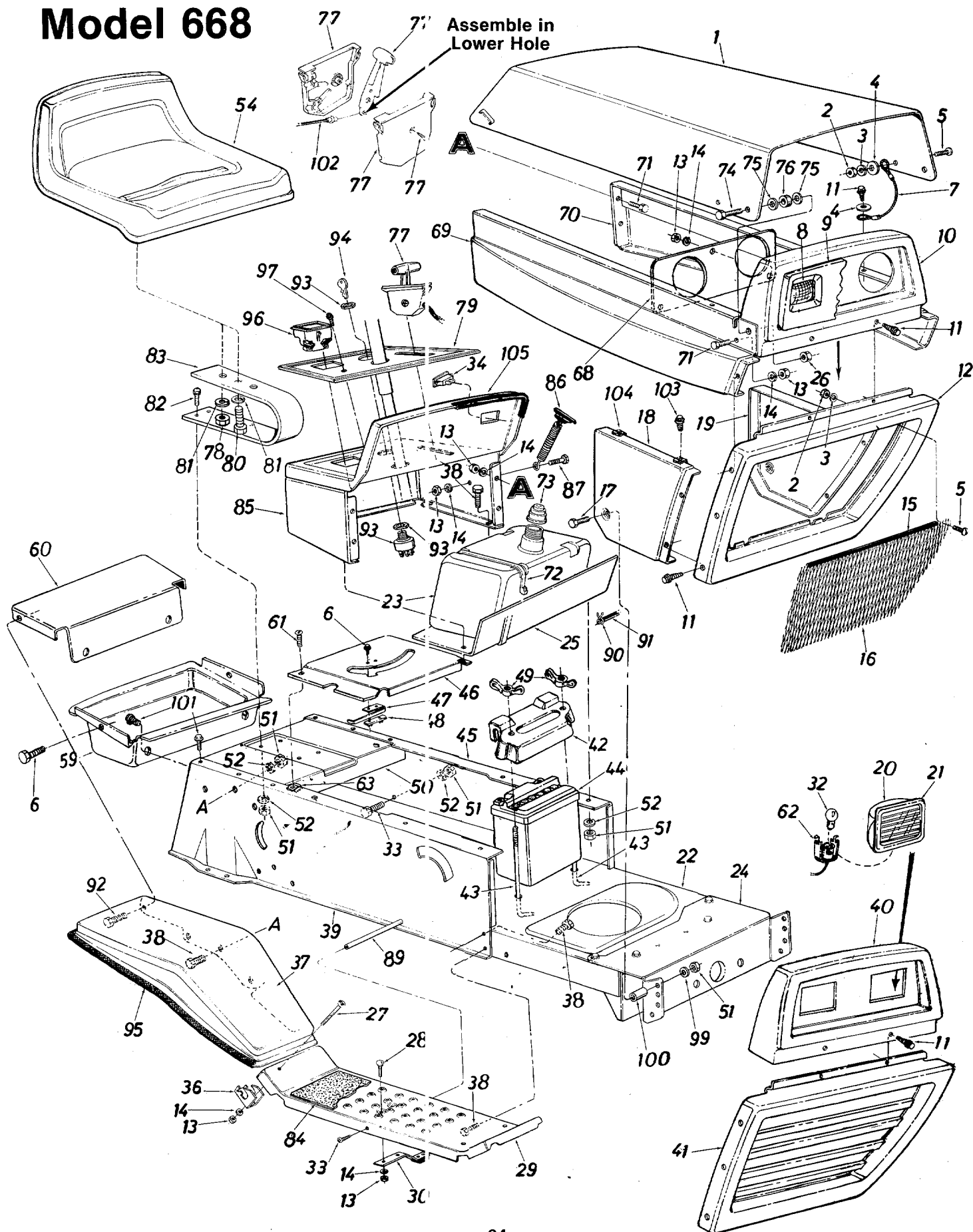
†Used with Grille Assembly Ref. No. 18
††Used with Grille Assembly Ref. No. 19



NOTE

This instruction manual covers various models, and all specifications shown do not necessarily apply to your models. Specifications subject to change without notice or obligation.

Model 668



Model 668

PARTS LIST FOR MODEL 668 LAWN TRACTOR

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	12780	—447	Hood		50	14607		Hitch Plate	
2	712-0121		Hex Nut #10-24 Thd.*		51	712-0267		Hex Nut 5/16-18 Thd.*	
3	736-0722		L-Wash. #10 I.D.		52	736-0119		L-Wash. 5/16" I.D.*	
4	736-0463		Fl-Wash. .25" I.D. x .62" O.D.		54	757-0264		Seat Ass'y. (used w/Hex Nut)	
5	710-0192		Truss Scr. #10-24 x .375" Lg.*			757-0299		Seat Ass'y. (used w/Hex Bolts)	
6	710-0473		Truss Hd. Scr. #10-24 x .50" Lg.*		59	731-0561	using 91058	Tool Tray (Optional)	
7	727-0199		Hood Stop		60	14789		Fender Panel (Optional)	
8	725-0222		Headlight†		61	710-0351	0964	Truss Mach. Tap Screw #10 x .50"	
9	12787		Headlight Bezel†		62	725-0963		Head Lamp Socket†	
10	12814	—462	Front Grille Upper Ass'y.†		63	726-0139		Speed Nut #10Z	
11	710-0227		Hex AB-Tap Scr. #8 x .50" Lg.		68	12788		Head Lamp Retainer†	
12	12781	—462	Lower Grille†		69	12784	—462	Side Panel—R.H.	
13	712-0287		Hex Nut 1/4-20 Thd.*		70	12785	—462	Side Panel—L.H.	
14	736-0329		L-Wash. 1/4" I.D.*		71	710-0258		Hex Bolt 1/4-20 x .62" Lg.*	
15	731-0144		Vinyl "U"-Channel†		72	726-0153		Tie Strap	
16	12791		Grille Screen†		73	723-0155		Fuel Cap Gauge	
17	710-0442		Hex Bolt 5/16-18 x 1.50" Lg.*		74	710-0253		Hex Bolt 3/8-16 x 1.00" Lg.*	
18	15544	—462	R.H. Lower Side Panel		75	736-0101		Fl-Wash. .380" I.D. x 1.00" O.D.	
19	15545	—462	L.H. Lower Side Panel		76	735-0126		Rubber Wash. .33" I.D. x .87" O.D.	
20	731-0705		Headlight Housing†	N	77	831-0692		Throttle Control Box Ass'y.	N
21	731-0706		Headlight Lens†	N	78	712-0206		Hex Nut 1/2-13 Thd. (Optional)	
22	14606		Lower Frame		79	731-0709		Dash Panel Insert	N
23	751-0172		Fuel Tank		80	710-0493		Hex Bolt 1/2-13 x 1.00" Lg. (2 Req'd.) (Optional)	
24	14619		Front Pivot Brkt.		81	736-0921		L-Wash. 1/2" I.D.*	
25	14603		Fuel Tank Support		82	710-0376		Hex Bolt 5/16-18 x 1.00" Lg.*	
26	712-0375		Hex Cent. L-Nut 3/8-16 Thd.		83	732-0458		Seat Spring	
27	710-0524		Truss Hd. Scr. 1/4-20 x 1.75" Lg.*		84	723-0360		Foot Pad (Optional)	
28	710-0134		Carriage Bolt 1/4-20 x .62" Lg.*		85	15895		Dash Panel Ass'y.	N
29	14604	—462	Running Board (R.H. & L.H.)		86	723-0296		Hood Latch Ass'y.	
30	—		Blade Brake Ass'y. (Refer to Deck Breakdown)		87	710-0289		Hex Bolt 1/4-20 x .50" Lg.*	
32	725-0963		Head Lamp†	N	89	738-0526		Running Board Rod	
33	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*		90	726-0207		Hose Clamp	
34	725-0634		Light Switch		91	751-0173		Fuel Line	
36	14671		Fender Clamp		92	710-0599		Thread Rolling Scr. 1/4-20 x .50" Lg.	
37	14666		Fender (R.H. & L.H.)		93	725-0267		Ignition Switch	
	15350		Fender (R.H. & L.H.) Used w/36" Rear Discharge Deck		94	725-0201		Ignition Key	
38	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		95	731-0516		Trim Strip	
39	14602		R.H. Side Frame		96	725-0925		Ammeter (Optional)	N
40	15871		Front Upper Grille Ass'y.†	N	97	710-0227		Hex "AB"-Tap Scr. #8 x .50" Lg.	
41	15872		Lower Grille†	N	99	736-0242		Belleville Wash. .34" I.D.	
42	731-0708		Battery Cover	N	100	22550		Spacer .344" I.D. x 1.0" O.D. x .75" Lg.	
43	711-0222		Battery Hold Down Rod		101	710-0726		Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.	
44	725-0514		12-V Battery		102	746-0505		Throttle Control Wire (B&S)	
45	14603		L.H. Side Frame			746-0504		Throttle Control Wire (Tec.)	
46	15824		Transmission Panel		103	710-0651		Hex Wash. Hd. Self-Tap Scr.	
47	725-0759		Reverse Safety Switch		104	726-0139		Speed Nut #10Z	
48	726-0222		Insulator Nut Plate		105	757-0272		Trim Strip—15"	
49	712-0113		Wing Nut 1/4-20						

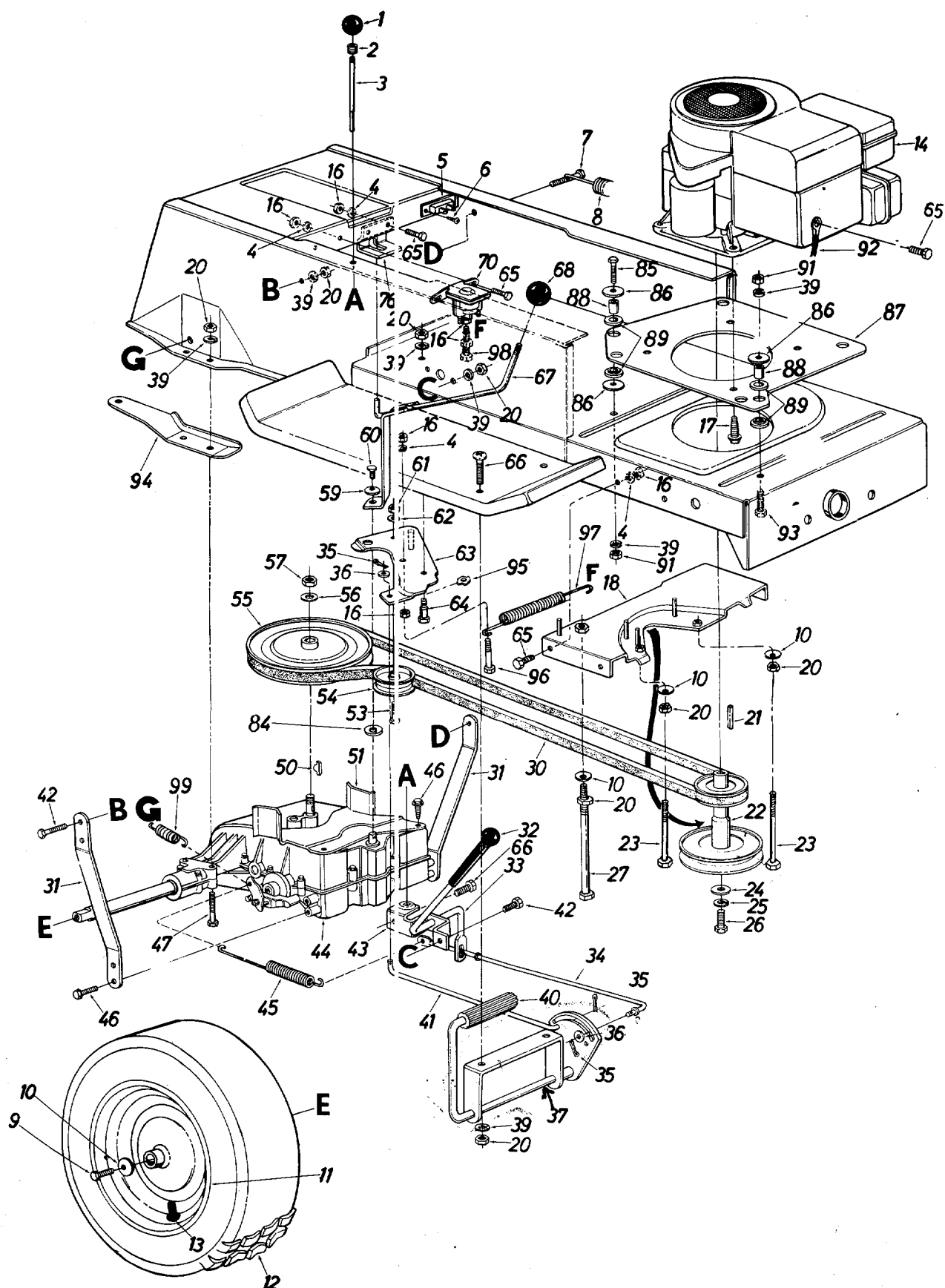
†Optional Parts

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

Models 618, 638, 668 and 698



Models 618, 638, 668 and 698

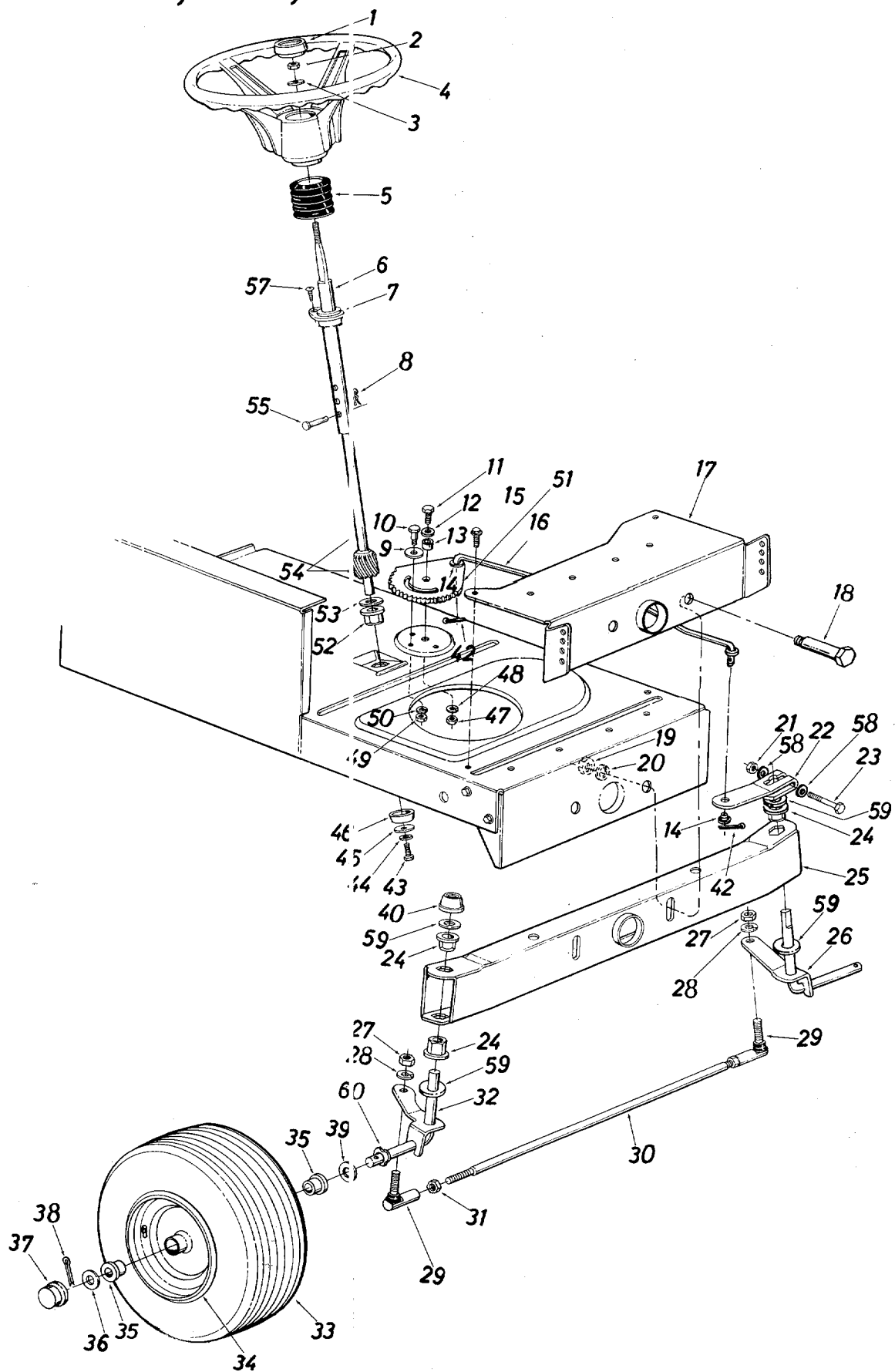
PARTS LIST FOR MODELS 618, 638, 668 and 698 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0187		Ball Knob 1.25" O.D. x 1/4-20 Thd.		44	—		Transaxle Complete	
2	732-0145		Compression Spring .30" O.D. x 1.00" Lg.		45	732-0413		Ext. Spring .590" O.D. x 7.08" Lg.	
3	711-0742		Brake Lockout Rod		46	710-0604		Hex Wash. Hd. AB-Tap Scr. 5/16 x .62" Lg.	
4	736-0329		L-Wash. 1/4" I.D.*		47	710-0378		Hex Bolt 5/16-18 x 2.50" Lg.*	
5	725-0459		Circuit Breaker		50	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.	
6	710-0351		Truss Hd. Phil. Scr. #10 x 1/2" Lg.		51	14631		Transaxle Belt Keeper	
7	710-0528		Hex Bolt 5/16-18 x 1.25" Lg.		53	710-0344		Hex Bolt 3/8-16 x 1.50" Lg.*	
8	732-0307		Ext. Spring .99" O.D. x 11.00" Lg.		54	756-0225		Flat Idler Pulley 3/8" I.D. x 2.75 O.D.	
9	710-0627		Hex Bolt 5/16-24 x .75" Lg.*		55	756-0374		Transaxle Pulley	
10	736-0242		Bell-Wash. 5/16" I.D.		56	736-0921		L-Wash. 1/2" I.D.*	
11	**		Rear Wheel Rim Only		57	712-0922		Hex Nut 1/2-20 Thd.*	
12	**		Rear Wheel Ass'y. Comp.		59	736-0270		Bell-Wash. .26" I.D. x .75" O.D.	
13	734-0255		Air Valve (Service Only)		60	710-0513		Hex Bolt 1/4-28 x .62" Lg.	
14	—		Engine		61	712-0798		Hex Nut 3/8-16 Thd.*	
15	734-0542		Rear Wheel Hub Cap (Optional—Not Shown)		62	736-0169		L-Wash. 3/8" I.D.*	
16	712-0287		Hex Nut 1/4-20 Thd.*		63	14656		Idler Brkt. Ass'y	
17	710-0502		Hex Bolt 3/8-16 x 1.25" Lg. (B & S Engine)		64	738-0140		Shld. Scr. .437" Dia. x 1.80" Lg. (5/16-18)	
	710-0650		Hex Wash. Hd. TT-Tap Scr. 5/16-18 x .88" Lg. (Tecumseh Engine)		65	710-0258		Hex Bolt 1/4-20 x .62" Lg.*	
18	14643		Belt Guard Brkt. Ass'y.		66	710-0323		Truss Hd. Mach. 5/16-18 x .75" Lg.*	
20	712-0267		Hex Nut 5/16-18 Thd.*		67	14627		Shift Lever Ass'y	
21	714-0114		Sq. Key 1/4" x 1/4" x 2.00" Lg.		68	720-0165		Ball Knob 1.25" O.D. x 3/8-16 Thd.	
22	756-0373		Two Step Engine Pulley		70	725-0771		Solenoid	
23	710-0833		Hex Bolt 5/16-18 x 5.25" Lg.		76	14630		Shift Lever Pivot Brkt.	
24	736-0322		Fl-Wash. 7/16" I.D. x 1.25" O.D. x .180		84	717-0234		Special Wash. 1.00" O.D.	
25	736-0171		L-Wash. 7/16" I.D.*		85	710-0158		Hex Bolt 5/16-24 x 1.25" Lg.*	
26	710-0757		Hex Bolt 7/16-20 x 1.50" Lg.		86	736-0343		Fl-Wash. 1.25" O.D. x .320" I.D.	
27	710-0833		Hex Bolt 5/16-18 x 5.25" Lg.*		87	14791		Engine Mounting Plate	
30	754-0266		"V"-Belt "A" Glass 85" Lg. Bare Back		88	750-0539		Spacer	
31	14653		Transaxle Brace		89	722-0153		Engine Mounting Grommet	
32	720-0143		Grip (Hand Brake)		91	712-0123		Hex Nut 5/16-24 Thd.*	
33	747-0386		Hill Holder Brake Handle		92	725-0122		Electric Ground Wire	
34	747-0385		Brake Rod		93	710-0624		Hex Bolt 5/16-24 x 1.50" Lg.*	
35	714-0111		Cotter Pin 3/32" Dia. x 1.00"*		94	14770		Transaxle Support Brkt.—R.H.	
36	736-0204		Fl-Wash. .344" I.D. x .625" O.D.			14769		Transaxle Support Brkt.—L.H. (Not Shown)	
37	14623		Brake and Clutch Pedal Ass'y.		95	736-0141		Wave Wash.	
39	736-0119		L-Wash. 5/16" I.D.*		96	710-0102		Hex Bolt 1/4-20 x 2.50" Lg.*	
40	735-0196		Foot Pedal Pad		97	732-0384		Ext. Spring 62 x 6.12	
41	747-0390		Clutch Rod		98	710-0102		Hex Bolt 1/4-20 x 2.50" Lg.*	
42	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		99	732-0303		Brake Return Spring	
43	14634		Brake Lock and Handle Support Brkt.						

**REAR WHEEL CHART

Description	18 x 9.50	18 x 8.50	18 x 6.50	16 x 6.50
Wheel Assembly Comp.	734-0817	734-0601	734-1132	734-0591
Tire Only	734-0448	734-0516	734-0294	734-0275
Rim Only	734-0603	734-0603	734-1133	734-0594

Models 618, 638, 668 and 698



Models 618, 638, 668 and 698

PARTS LIST FOR MODELS 618, 638, 668 AND 698 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap		30	711-0613		Tie Rod	
2	712-0267		Hex Nut 5/16-18 Thd.*		31	712-0711		Hex Jam Nut 3/8-24 Thd.*	
3	736-0242		Belleville Wash. .345" I.D.		32	14650		Front Axle Ass'y.—R.H.	
4	731-0219		Steering Wheel 12" Dia.			15840		Front Axle Ass'y.—R.H.†	
	731-0356		Steering Wheel 13.5" Dia.		33	**		Wheel Ass'y. Comp.	
5	731-0559		Steering Bellow—4.5" (618, 638 & 698)		34	**		Front Wheel Rim Only	
	731-0654		Steering Bellow—9" (668)		35	741-0313		Bearing	
6	14775		Steering Column Ass'y.		36	736-0285		FI-Wash. .635 I.D. x 1.59" O.D.	
7	741-0356		Flange Bearing .890 I.D. x 1.36 O.D.		37	731-0484		Front Wheel Hub Cap	
8	714-0147		Internal Cotter Pin 1/4" Dia.			734-0541		Front Wheel Hub Cap (Chrome—Not Shown) (Optional)	
9	736-0319		FI-Wash. .438" I.D. x 1.37" O.D.		38	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	
10	738-0141		Shoulder Bolt .437" Dia. x .35 Lg. 5/16-18 Thd.		39	736-0156		FI-Wash. .635" I.D. x 1.20" O.D.	
11	710-0152		Hex Bolt 3/8-24 x 1.0" Lg. (Grade 5)		40	726-0214		Push Cap 5/8" Dia. Rod	
12	736-0206		FI-Wash. .38" I.D. x 1.0" O.D.		42	714-0115		Cotter Pin 1/8" Dia. x 1.0" Lg.	
13	750-0535		Spacer .380" I.D. x .625" O.D. x .227		43	710-0538		Hex L-Bolt 5/16-18 x .62" Lg.*	
14	731-0658		Bushing		44	736-0119		L-Wash. 5/16" I.D.*	
15	710-0726		Hex Wash. Hd. Self-Tap Scr.		45	736-0231		FI-Wash. .344" I.D. x 1.25" O.D.	
16	711-0691		Steering Drag Link		46	750-0532		Spacer (Plastic)	
17	14619		Front Pivot Brkt.		47	712-0241		Hex Nut 3/8-24 Thd.*	
18	738-0527		Shoulder Bolt .498" Dia. x 2.04 Lg. 3/8-16 Thd.		48	736-0169		L-Wash. 3/8" I.D.*	
19	712-0798		Hex Nut 3/8-16 Thd.*		49	712-0267		Hex Nut 5/16-18 Thd.*	
20	736-0169		L-Wash. 3/8" I.D.*		50	736-0119		L-Wash. 5/16" I.D.*	
21	712-0237		Hex Cent. L-Nut 5/16-24 Thd.		51	717-0468		Steering Gear Segment	
22	14611		Steering Arm Front Axle		52	741-0225		Hex Flg. Brg. .634 I.D.	
23	710-0772		Hex Bolt 5/16-24 x 2.00" Lg. (Grade 5)		53	736-0187		FI-Wash. (Hardened)	
24	741-0225		Hex Flg. Brg. .634 I.D.		54	738-0522		Steering Shaft Lower	
25	14608		Pivot Bar Ass'y.		55	711-0684		Clevis Pin 1/4" Dia. x 1.00" Lg.	
26	14649		Front Axle Ass'y.—L.H.		57	710-0837		Oval Hd. Cr.—Sunk Scr. #10 x 5/8" Lg.	
	15841		Front Axle Ass'y.—L.H.†	N	58	736-0242		Bell-Wash.	
27	712-0241		Hex Nut 3/8-24 Thd.*		59	736-0187		FI-Wash. (Hardened)	
28	736-0169		L-Wash. 3/8" I.D.*		60	736-0174		Wave Washer	
29	723-0156		Ball Joint 3/8-24 Thd.						

†Used With 30" Rear Discharge Deck Only.

(462—Red Flake)

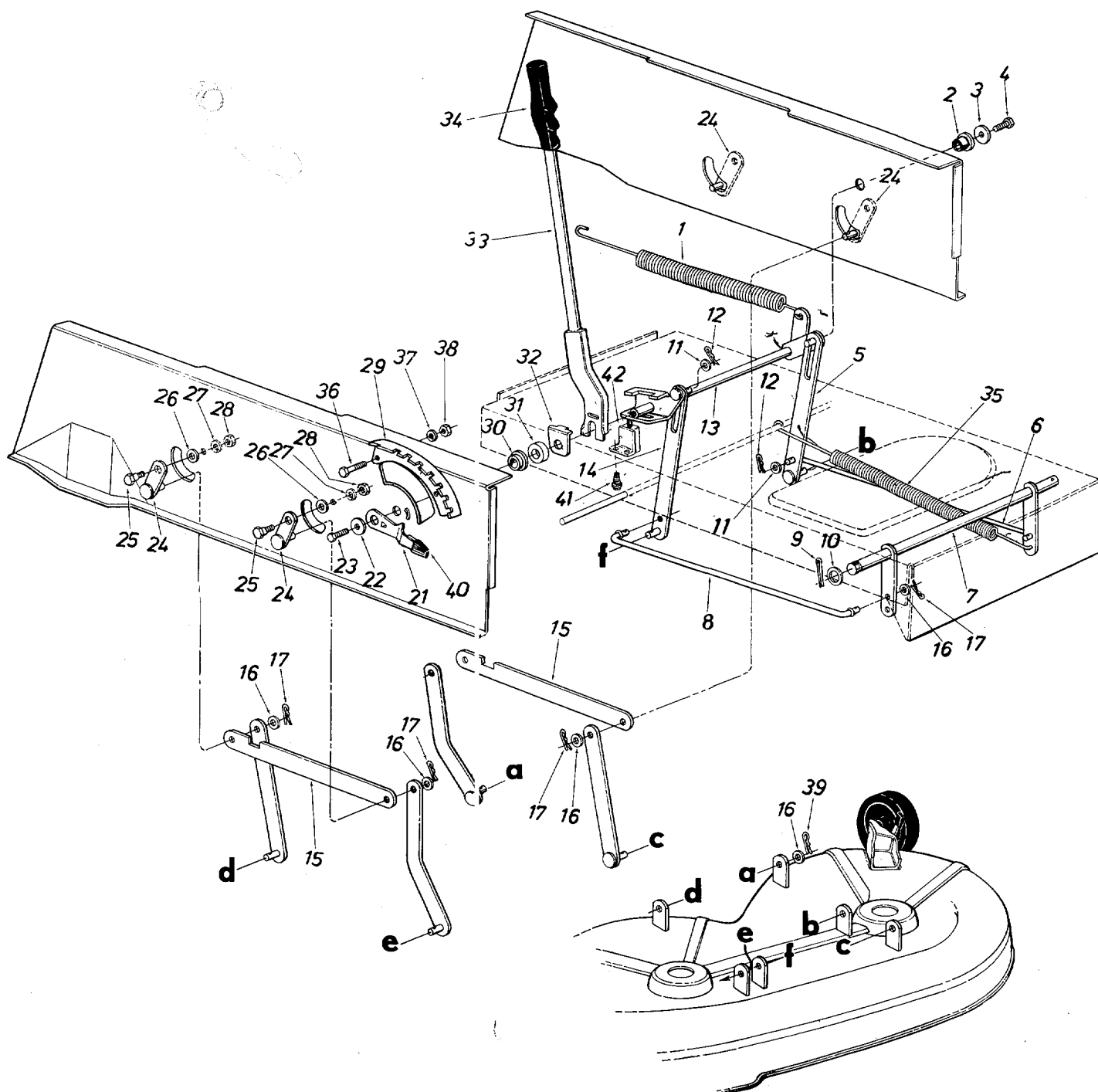
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**FRONT WHEEL CHART

Description	15 x 6.00 (Rib Tread)	15 x 6.00 (Turf Tread)	13 x 5.00
Wheel Assembly Comp.	734-0998	734-1136	734-0999
Tire Only	734-0498	734-0427	734-0495
Rim Only	734-0997	734-0997	734-0986
Bearing	741-0313	741-0313	741-0313
Air Valve	734-0255	734-0255	734-0255
Grease Fitting	737-0146	737-0146	734-0146

Models 618, 638, 668 and 698



Models 618, 638, 668 and 698

PARTS LIST FOR MODELS 618, 638, 668 AND 698 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	732-0307		Extension Spring .99" O.D. x 11.00" Lg.		24	09721		Pivot Link Ass'y.	
2	741-0313		Flange Bearing .634" I.D.		25	738-0140		Shld. Bolt .437" Dia. x .180" Lg. (5/16-18)	
3	736-0231		Fl-Wash. .344" I.D. x 1.125" O.D. x .125		26	736-0264		Fl-Wash. .344" I.D. x .62" O.D.	
4	710-0604		Hex Wash. Hd. 5/16-18 x .62" Lg.		27	736-0119		L-Wash. 5/16" I.D.*	
5	14802		Link Deck Lift Ass'y.		28	712-0267		Hex Nut 5/16-18 Thd.*	
6	711-0738		Stabilizer Rod		29	14633		Index Brkt.	
7	14647		Stabilizer Shaft Ass'y.		30	736-0341		Flange Wash. .628" I.D. x 1.25" O.D.	
8	711-0738		Stabilizer Rod		31	735-0216		Rubber Wash. 1.50" O.D. x .63" I.D. x .60	
9	714-0470		Cotter Pin 1/8" Dia. x 1 1/4" Lg.*		32	14654		Retainer Washer—Lift Handle	
10	736-0156		Fl-Wash. .635" I.D. x 1.12" O.D.		33	14645		Lift Handle Ass'y.	
11	736-0192		Fl-Wash. .531" I.D. x .940" O.D.		34	720-0157		Grip (Lift Handle)	
12	714-0101		Inter. Cotter Pin .50" Dia.		35	732-0410		Extension Spring .99" O.D. x 13.25" Lg.	
13	14641		Lift Shaft Ass'y.		36	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
14	14802		Link Deck Lift Ass'y.		37	736-0119		L-Wash. 5/16" I.D.*	
15	09735		Connecting Rod		38	712-0267		Hex Nut 5/16-18 Thd.*	
16	736-0300		Fl-Wash. .40" I.D. x .88" O.D.		39	714-0101		Inter. Cotter Pin	
17	714-0104		Inter. Cotter Pin For 3/8" Rod		40	08540		Knob	
21	732-0412		Deck Lift—Down Stop		41	710-0351		Hex AB-Tap Scr. #10 x .50" Lg.	
22	736-0231		Fl-Wash. .344" I.D. x 1.125" O.D. x .125		42	725-0803		Safety Switch	
23	710-0604		Hex Wash. Hd. 5/16-18 x .62" Lg.						

(462—Red Flake)

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—11836 (462).)

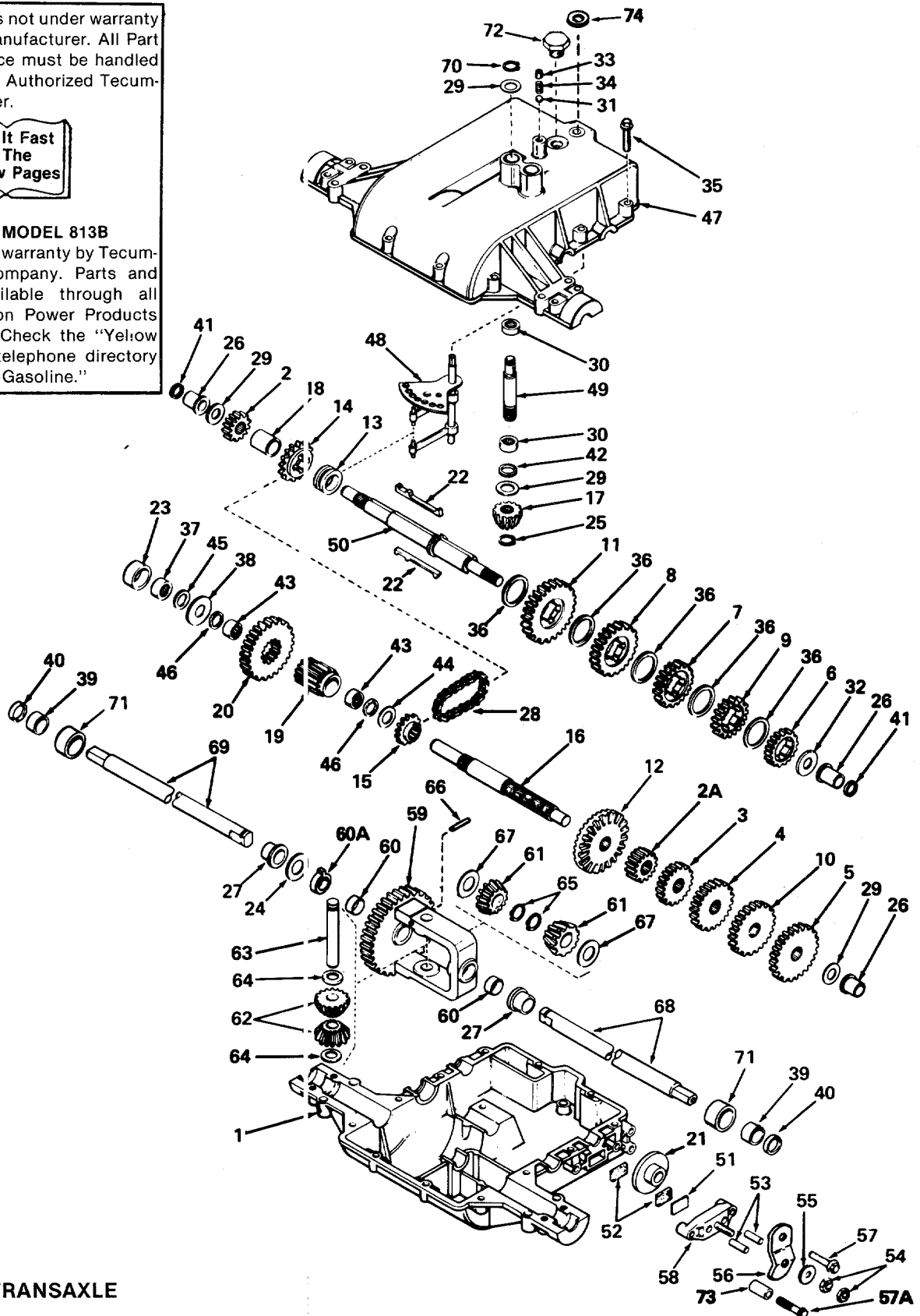
Models 618, 638, 668 and 698

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the local Authorized Tecumseh Service Dealer.



PEERLESS MODEL 813B

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."



**FIVE-SPEED TRANSAXLE
MODEL 813B
(717-0448)**

Models 618, 638, 668 and 698

PARTS LIST FOR FIVE-SPEED TRANSAXLE MODEL 813B (717-0448)

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	PE-770071A	Case, Transaxle	39	PE-530105	Bearing, Needle
2	PE-778136	Gear, Spur (15 Teeth)	40	PE-788042	Seal, Oil
2A	PE-778145	Gear, Spur (12 Teeth)	41	PE-788051	Ring, Square Cut
3	PE-778151	Gear, Spur (15 Teeth)	42	PE-792001	Ring, Square Cut
4	PE-778126A	Gear, Spur (20 Teeth)	43	PE-780112	Bearing, Needle
5	PE-778129A	Gear, Spur (30 Teeth)	44	PE-780114	Washer, Flat
6	PE-778121A	Gear, Spur (20 Teeth)	45	PE-788052	Ring, Square Cut
7	PE-778124A	Gear, Spur (30 Teeth)	46	PE-788053	Ring, Square Cut
8	PE-778125	Gear, Spur (35 Teeth)	47	PE-772077B	Cover, Transaxle
9	PE-778123A	Gear, Spur (25 Teeth)	48	PE-784290	Rod and Fork Ass'y., Shift
10	PE-778127A	Gear, Spur (25 Teeth)	49	PE-776140	Shaft, Input
11	PE-778146A	Gear, Spur (37 Teeth)	50	PE-776184A	Shaft, Brake
12	PE-778137A	Gear, Bevel (42 Teeth)	51	PE-790007	Plate, Brake Pad
13	PE-784266	Collar, Shift	52	PE-790006	Pad, Brake
14	PE-786083	Sprocket (18 Teeth)	53	PE-786026	Pin, Dowel
15	PE-786082	Sprocket (9 Teeth)	54	PE-792075	Lock Nut, 5/16-24
16	PE-776181	Shaft, Counter	55	PE-792076	Washer, Flat
17	PE-778113A	Bevel Pinion, Input	56	PE-790004	Lever, Brake
18	PE-786074	Spacer	57	PE-792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1-1/4
19	PE-778138	Pinion, Output	57A	PE-792085	Screw, Hex Hd. Thread Forming, 1/4-20 x 2-1/4
20	PE-778139	Gear, Output	58	PE-790005	Holder, Brake Pad
21	PE-790003	Disc, Brake	59	PE-778053A	Gear Ass'y., Differential (Incl. 2 of No. 60)
22	PE-792089A	Key	60	PE-780064	Bushing
23	PE-786075	Spacer	60A	PE-780120	Bushing
24	PE-780001	Washer	61	PE-778067	Gear, Bevel
25	PE-788040	Ring, Retaining	62	PE-778068	Pinion, Bevel
26	PE-780105A	Bushing, Flanged	63	PE-786034	Pin Drive
27	PE-780118	Bushing, Flanged	64	PE-780065	Washer, Thrust
28	PE-786081	Chain, Roller (No. 41 Chain, 24 Links)	65	PE-792018	Ring, Retaining
29	PE-780072	Washer, Thrust	66	PE-792040	Pin, Roll
30	PE-780086	Bearing, Needle	67	PE-780001	Washer, Thrust
31	PE-792077	Ball, Steel	68	PE-774420	Axle (14-7/8" Long)
32	PE-780109	Washer, Thrust	69	PE-774419	Axle (13" Long)
33	PE-792078	Screw, Set, 3/8-16 x 3/8	70	PE-792035	Ring, Retaining
34	PE-792079	Spring	71	PE-786084	Spacer
35	PE-792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1-1/4	72	PE-792074	Plug
36	PE-780108	Washer, Thrust	73	PE-786066	Spacer
37	PE-780111	Bearing, Needle	74	PE-792083	Washer
38	PE-780113	Washer, Flat			

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the local Authorized Tecumseh Service Dealer.

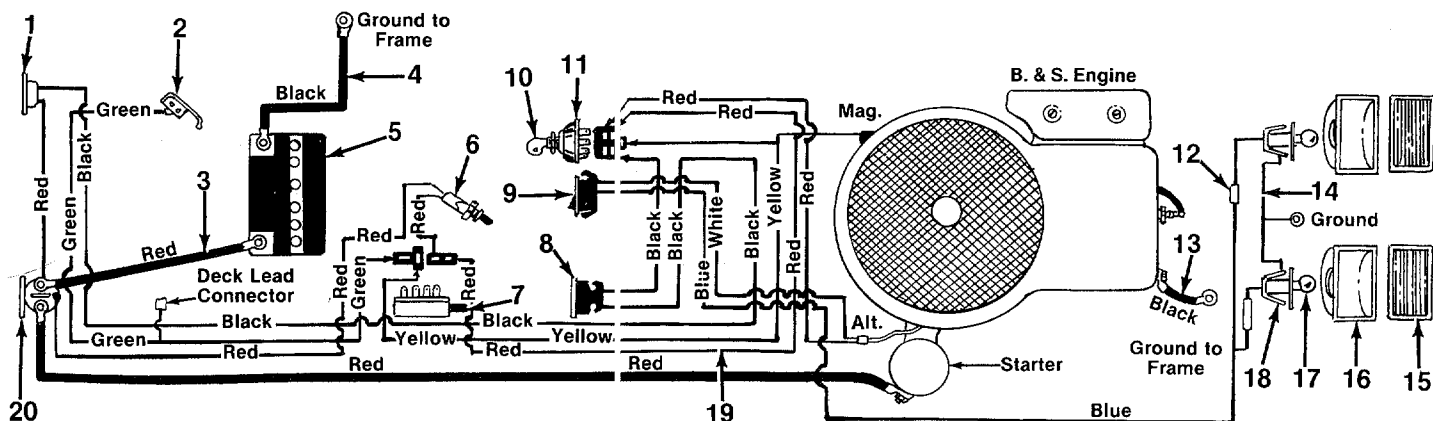


PEERLESS MODEL 813B

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

Models 618 and 668

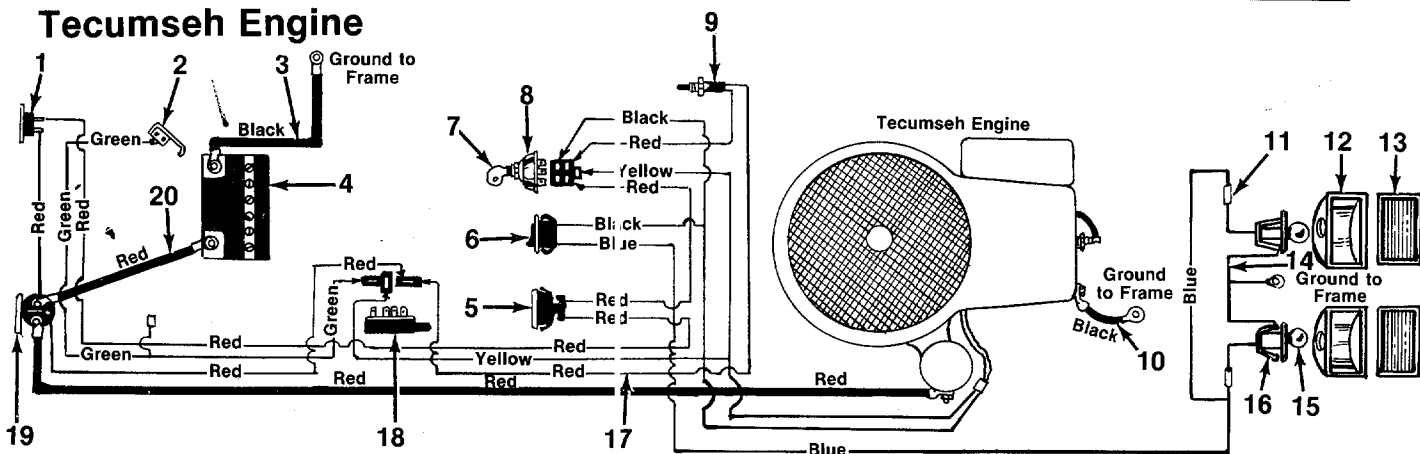
Briggs and Stratton Engine



PARTS LIST FOR ELECTRICAL SYSTEM—BRIGGS AND STRATTON ENGINE

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0459	Circuit Breaker	11	725-0267	Ignition Switch
2	725-0759	Spring—Switch (Reverse Safety)	12	725-0717	Tab Receptacle
3	725-0150	Electric Wire (Red-Positive)	13	725-0976	Ground Wire 7.25" Lg. (Black-Engine)
4	725-0975	Ground Wire 9.0" Lg. (Black-Negative)	14	725-0967	Clip On Ground Wire
5	725-0514	12 V-Battery	15	731-0706	Lens—Headlamp
6	725-0577	Safety Switch (Clutch)	16	731-0705	Headlight Housing
7	725-0803	Safety Switch (P.T.O.)	17	725-0963	Lamp
8	725-0925	Ammeter	18	725-0964	Headlamp Socket
9	725-0634	Light Switch	19	725-0941	Wire Harness
10	725-0201	Ignition Key	20	725-0771	Solenoid

Tecumseh Engine

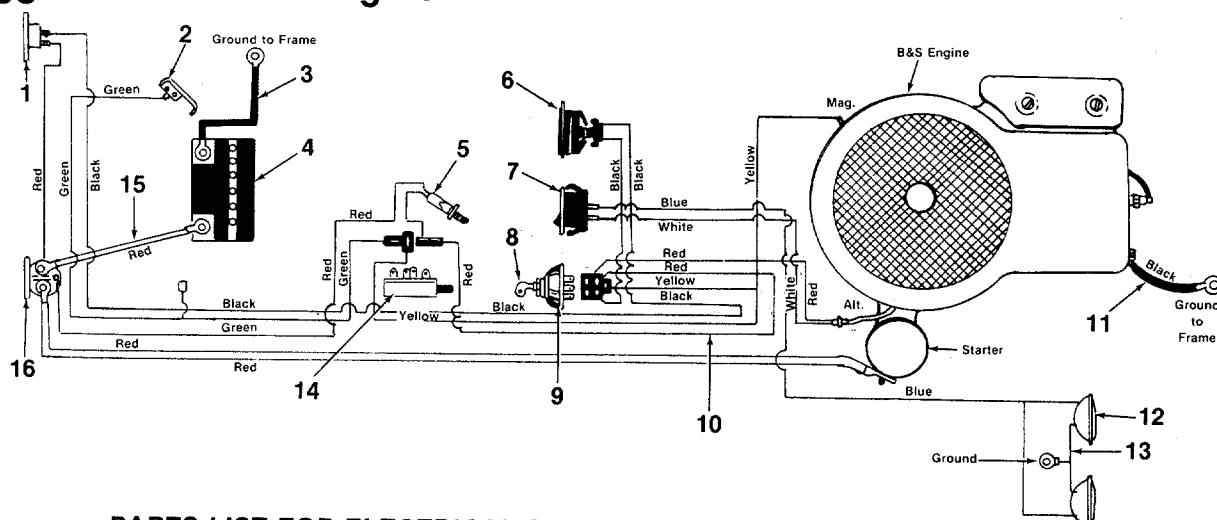


PARTS LIST FOR ELECTRICAL SYSTEM—TECUMSEH ENGINE

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0459	Circuit Breaker	11	725-0717	Tab Receptacle
2	725-0759	Spring Switch (Reverse Safety)	12	731-0705	Headlight Housing
3	725-0975	Ground Wire (Black—Negative)	13	731-0706	Lens
4	725-0514	12 Volt Battery	14	725-0967	Clip On Ground Wire
5	725-0925	Ammeter	15	725-0963	Lamp
6	725-0634	Light Switch	16	725-0964	Lamp Socket
7	725-0201	Ignition Key	17	725-1007	Wire Harness
8	725-0267	Ignition Switch	18	725-0803	Safety Switch (P.T.O.)
9	725-0268	Safety Switch (Clutch)	19	725-0771	Solenoid
10	725-0976	Ground Wire 7.25" Lg. (Black—Engine)	20	725-0150	Electric Wire (Red—Positive)

Models 638 and 698

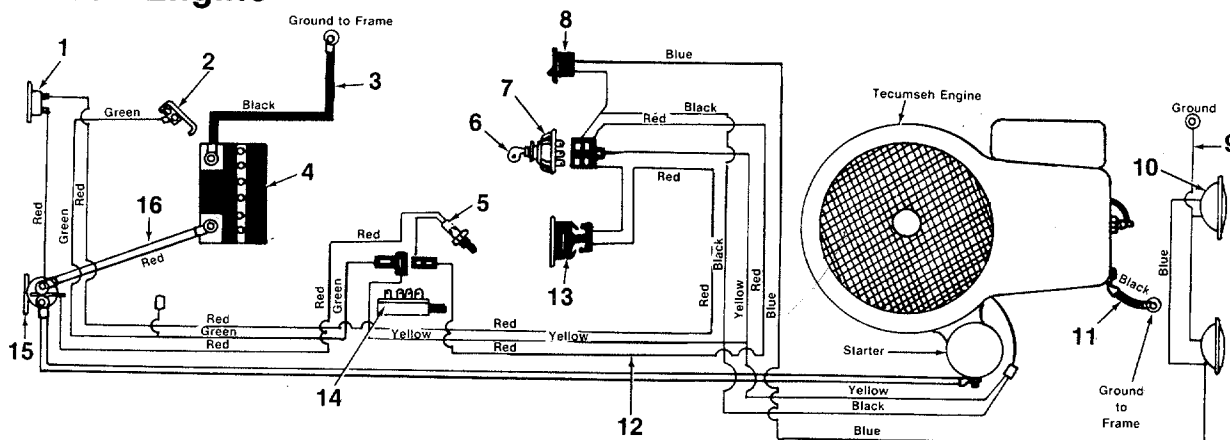
Briggs and Stratton Engine



PARTS LIST FOR ELECTRICAL SYSTEM— BRIGGS AND STRATTON ENGINE

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0459	Circuit Breaker	9	725-0267	Ignition Switch
2	725-0759	Spring Switch (Reverse Safety)	10	725-0970	Wire Harness
3	725-0975	Ground Wire 9.0" Lg. (Black Neg.)	11	725-0976	Ground Wire 7.25" Lg. (Black)
4	725-0514	12 Volt Battery	12	725-0222	Headlight
5	725-0577	Safety Switch (Clutch)	13	725-0916	Ground Wire
6	725-0925	Ammeter	14	725-0803	Safety Switch (P.T.O.)
7	725-0634	Headlight Switch	15	725-0150	Electric Wire (Red Pos.)
8	725-0201	Ignition Key	16	725-0771	Solenoid

Tecumseh Engine



PARTS LIST FOR ELECTRICAL SYSTEM— TECUMSEH ENGINE

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0459	Circuit Breaker	9	725-0916	Ground Wire
2	725-0759	Spring Switch (Reverse Safety)	10	725-0222	Head Light
3	725-0975	Ground Wire 9.0" Lg. (Black Neg.)	11	725-0976	Ground Wire 7.25" Lg. (Black)
4	725-0514	12 Volt Battery	12	725-1042	Wire Harness
5	725-0577	Safety Switch (Clutch)	13	725-0925	Ammeter
6	725-0201	Ignition Key	14	725-0803	Safety Switch (P.T.O.)
7	725-0267	Ignition Switch	15	725-0771	Solenoid
8	725-0634	Light Switch	16	725-0150	Electric Wire (Red Pos.)

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	BIRMINGHAM
Auto Electric & Carburetor Co.	2625 4th Ave. S. 5233
ARKANSAS	NORTH LITTLE ROCK
Sutton's Lawn Mower Shop	5301 Roundtop Drive
	Box 368, Rt. 4 72117
CALIFORNIA	PORTERVILLE
Billious	75 North D Street 53257
COLORADO	DENVER
Spitzer Industrial Products Co.	6601 N.
	Washington St. 80229
FLORIDA	JACKSONVILLE
Radco Distributors	4909 Victor St.
	Box 5459 52207
	OPA LOCKA
Small Eng. Dist.	2351 N.W. 147th St. 53054
GEORGIA	EAST POINT
East Point Cycle & Key	2834 Church St. 50344
ILLINOIS	LYONS
Keen Edge Co.	8615 Ogden Ave. 50534
INDIANA	ELKHART
Parts & Sales Inc.	2101 Industrial Pkwy. 56516
IOWA	DUBUQUE
Power Lawn & Garden Equip.	2551 J.F. Kennedy 52001
LOUISIANA	NEW ORLEANS
Suhren Engine Co.	8330 Earhart Blvd. 70118
MARYLAND	TAKOMA PARK
Center Supply Co.	6867 New Hampshire
	Ave. 20912
MASSACHUSETTS	SPRINGFIELD
Morton B. Collins Co.	300 Birnie Ave. 01107
MICHIGAN	LANSING
Lorenz Service Co.	2500 S. Pennsylvania .. 48910
	MOUNT CLEMENS
Power Equipment Dist.	340 Hubbard 48043
MINNESOTA	HOPKINS
Hance Distributing Inc.	420 Excelsior Ave. W. 55343
MISSISSIPPI	BILOXI
Biloxi Sales & Service, Inc.	506 Caillavet St. 39533
MISSOURI	KANSAS CITY
Automotive Equip. Service	3117 Holmes St. 64109
	ST. JOSEPH
Ross-Frazier Supply Co.	8th and Monterey 64503
	ST. LOUIS
Henzler, Inc.	2015 Lemay Ferry Rd. 63125
NEW JERSEY	BELLMAWR
Lawnmower Parts Inc.	717 Creek Rd. 08030
NEW MEXICO	ALBUQUERQUE
Spitzer Eng. & Parts	1023 Third Ave. N.W. 87103
NEW YORK	CARTHAGE
Gamble Dist., Inc.	West End Ave. 13619

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

NORTH CAROLINA	GOLDSBORO
Smith Hardware Co.	515 N. George St. 27530
	GREENSBORO
Dixie Sales Company	335 N. Green 27402
OHIO	CARROLL
Stebbe's Mid-State Mower Supply ..	Box 366, 71 High St. 43112
	CLEVELAND
Bleckrie, Inc.	7900 Lorain Ave. 44102
National Central	WADSWORTH
	687 Seville Rd. 44281
Burton Supply Co.	YOUNGSTOWN
	1301 Logan Ave.
	Box 929 44501
OKLAHOMA	MUSKOGEE
Victory Motors, Inc.	605 S. Cherokee 74401
OREGON	PORTLAND
Kenton Supply Co.	8216 N. Denver Ave. 97217
PENNSYLVANIA	HARRISBURG
EECO Inc.	4021 N. 6th St. 17110
	PHILADELPHIA
Thompson Rubber Co.	5222-24 N. Fifth St. 19120
	PITTSBURGH
Bluemont Co.	11125 Frankstown Rd. 15235
	PUNXSUTAWNEY
Frank Roberts & Sons	R.D. 2 15767
	SCRANTON
Scranton Auto Ignition Co.	1133-35 Wyoming Ave. 18509
TENNESSEE	KNOXVILLE
Master Repair Service	2000 Western Ave. 37921
	MEMPHIS
American Sales & Service, Inc.	3035-43 Bellbrook 38116
TEXAS	DALLAS
Marr Brothers, Inc.	423 E. Jefferson 75203
	FORT WORTH
Woodson Sales Corp.	1702 N. Sylvania 76111
	HOUSTON
Bullard Supply Co.	2409 Commerce St. 77003
	SAN ANTONIO
Engine House Inc.	8610 Botts Lane
	P.O. Box 17867 78217
UTAH	SALT LAKE CITY
A-1 Engine & Mower Co.	439 E. 900 So. 84111
VIRGINIA	ASHLAND
RBI Corp.	101 Cedar Ridge Dr. 23005
WASHINGTON	SEATTLE
Bailey's Inc.	1414 14th Ave. 98122
WISCONSIN	APPLETON
Automotive Supply Co.	123 S. Linwood Ave.
	P.O. Box 798 54911
	CHILTON
Horst Dist.	444 N. Madison 53014

WARRANTY PARTS AND SERVICE POLICY

(0783)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.